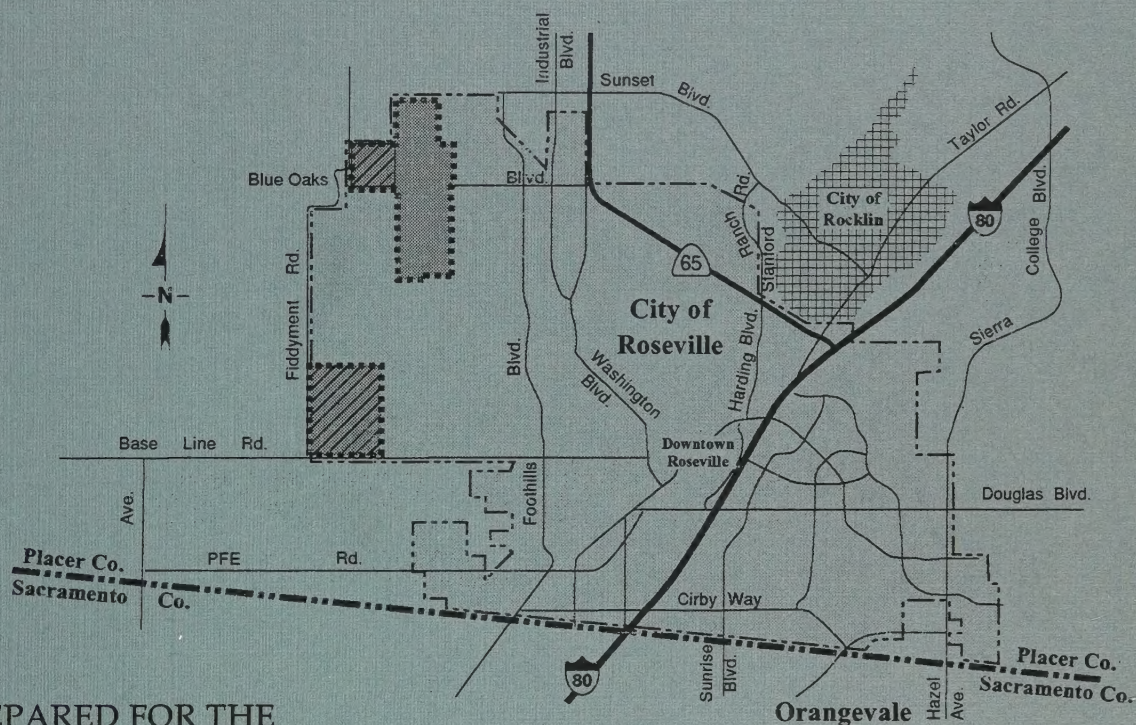


North Roseville Specific Plan

Draft Environmental Impact Report SCH #96112014



PREPARED FOR THE

**City of Roseville
Planning Department**



PREPARED BY

EIP Associates

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

JUN 30 1997

UNIVERSITY OF CALIFORNIA

NORTH ROSEVILLE SPECIFIC PLAN

DRAFT ENVIRONMENTAL IMPACT REPORT

Prepared for:

City of Roseville
Planning Department

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

JUN 30 1997

Prepared by:

EIP Associates
Sacramento, California

UNIVERSITY OF CALIFORNIA

May 1997



Digitized by the Internet Archive
in 2025

<https://archive.org/details/C124919458>

TABLE OF CONTENTS

TABLE OF CONTENTS

| <u>Chapter</u> | <u>Page</u> |
|--|-------------|
| 1. INTRODUCTION | 1-1 |
| 2. SUMMARY OF IMPACTS AND MITIGATION MEASURES | 2-1 |
| 3. PROJECT DESCRIPTION | 3-1 |
| 4. ENVIRONMENTAL ANALYSIS | 4-1 |
| 4.0 Introduction to Analysis | 4.0-1 |
| 4.1 Land Use | 4.1-1 |
| 4.2 Population, Employment and Housing | 4.2-1 |
| 4.3 Soils, Geology and Seismicity | 4.3-1 |
| 4.4 Hydrology and Water Quality | 4.4-1 |
| 4.5 Biological Resources | 4.5-1 |
| 4.6 Cultural Resources | 4.6-1 |
| 4.7 Aesthetics and Visual Resources | 4.7-1 |
| 4.8 Hazardous Materials and Public Safety | 4.8-1 |
| 4.9 Transportation and Circulation | 4.9-1 |
| 4.10 Air Quality | 4.10-1 |
| 4.11 Noise | 4.11-1 |
| 4.12 Public Services and Utilities | 4.12-1 |
| 5. OTHER CEQA CONSIDERATIONS | 5-1 |
| 5.1 Significant Irreversible Environmental Effects | 5-1 |
| 5.2 Cumulative Impacts | 5-2 |
| 5.3 Growth-Inducing Impacts | 5-20 |
| 5.4 Significant and Unavoidable Impacts | 5-21 |
| 6. PROJECT ALTERNATIVES | 6-1 |
| 7. REFERENCES | 7-1 |
| 8. REPORT PREPARATION | 8-1 |

TABLE OF CONTENTS (Continued)

APPENDICES

- A. NOP and Comment Letters
- B. Distribution List
- C. General Plan Goals and Policies
- D. Existing Plus Project Analysis
- E. Biological Information
- F. Hazardous Materials Information
- G. Air Quality Information
- H. Mitigation Monitoring Plan

LIST OF TABLES

| <u>Table</u> | <u>Page</u> |
|--------------|---|
| 2-1 | Summary of Impacts and Mitigation Measures 2-6 |
| 2-2 | Comparison of Alternatives to the Proposed Project 2-14 |
| 3-1 | North Roseville Specific Plan Land Use Allocation 3-10 |
| 4.1-1 | Land Use Residual Impact Summary Table 4.1-25 |
| 4.2-1 | Population Growth, Placer County, and Roseville (1980-2000) 4.2-2 |
| 4.2-2 | Employment, Placer County and City of Roseville (1990-1996) 4.2-3 |
| 4.2-3 | Housing Types, Placer County and City of Roseville Year 1996 4.2-5 |
| 4.2-4 | Housing Characteristics, Placer County and City of Roseville Year 1990 and 1996 4.2-5 |
| 4.2-5 | City of Roseville Occupancy Permits Issued (As of January 1996) 4.2-6 |
| 4.2-6 | City of Roseville Regional Fair Share of Affordable Housing 4.2-7 |
| 4.2-7 | North Roseville Specific Plan Employment Generation 4.2-11 |
| 4.2-8 | Phase I and II North Roseville Specific Plan Proposed Residential Land Use and Population 4.2-15 |
| 4.2-9 | Population, Employment and Housing Residual Impact Summary Table . . . 4.2-17 |
| 4.3-1 | Active Faults Within 100 Kilometers of the Project Site 4.3-6 |
| 4.3-2 | Soils, Geology and Seismicity Residual Impact Summary Table 4.3-21 |
| 4.4-1 | Estimated Flood Elevations and Peak Flows for Pleasant Grove Creek 4.4-6 |
| 4.4-2 | Estimated Flood Elevations and Peaks Flows for South Branch Pleasant Grove Creek 4.4-6 |
| 4.4-3 | Tributary "A" to Pleasant Grove Creek Flowing from the North Across the Diamond Creek Property 4.4-8 |
| 4.4-4 | Tributary "B" to Pleasant Grove Creek Flowing from the South Across the Mourier 140 and Diamond Creek Properties 4.4-8 |
| 4.4-5 | Curry Creek (Tributary "C") Within the Wood Creek West Property 4.4-9 |
| 4.4-6 | Tributary "D" to the South Branch of Pleasant Grove Creek 4.4-9 |
| 4.4-7 | Estimated Runoff under Existing Conditions 4.4-12 |
| 4.4-8 | Typical Concentrations of Non-Point Source Pollutants in Stormwater 4.4-23 |
| 4.4-9 | Hydrology and Water Quality Residual Impact Summary Table 4.4-30 |
| 4.5-1 | Existing Habitats in the Plan Area 4.5-3 |
| 4.5-2 | Status of Wetland Delineations and Permit Processes 4.5-6 |
| 4.5-3 | Special-Status Animal Species Observed in the North Roseville Area 4.5-9 |
| 4.5-4 | Potential Riparian Losses Due to Roads and Trails for Phase I and Full Project 4.5-19 |
| 4.5-5 | Biological Resources Residual Impact Summary Table 4.5-34 |

LIST OF TABLES (Continued)

| <u>Table</u> | <u>Page</u> |
|--|-------------|
| 4.6-1 Cultural Resources Residual Impact Summary Table | 4.6-12 |
| 4.7-1 Visual Quality Residual Impact Summary Table | 4.7-17 |
| 4.8-1 Hazardous Materials and Public Safety Residual Impact Summary Table . . . | 4.8-21 |
| 4.9-1 Arterial and Collector System in the City of Roseville | 4.9-3 |
| 4.9-2 Level of Service Definitions Signalized Intersections | 4.9-10 |
| 4.9-3 Existing Levels of Service at Signalized Intersections | 4.9-12 |
| 4.9-4 Required Roadway Improvements Under the 2010 Market Scenario | 4.9-25 |
| 4.9-5 2010 Development Assumptions in South Placer County Outside of City of Roseville | 4.9-27 |
| 4.9-6 Average Daily Trip Generation of the Proposed Project | 4.9-31 |
| 4.9-7 North Roseville Specific Plan Average Daily Traffic Volumes on Placer County Roadways (2010 Market Conditions) | 4.9-37 |
| 4.9-8 Average Daily Traffic Volumes on City of Rocklin Roadways | 4.9-38 |
| 4.9-9 Average Daily Traffic Volumes on Roadways Crossing Placer/Sutter County Line | 4.6-39 |
| 4.9-10 Traffic and Circulation Residual Impact Summary Table | 4.9-43 |
| 4.10-1 Federal and State Ambient Air Quality Standards | 4.10-3 |
| 4.10-2 Health Effects Summary of the Major Criteria Air Pollutants | 4.10-3 |
| 4.10-3 1993 Base Year Emissions Summary for the Sacramento Valley Air Basin Portion of Placer County | 4.10-7 |
| 4.10-4 Predicted Existing Maximum 1-Hour and 8-Hour Carbon Monoxide Concentrations | 4.10-8 |
| 4.10-5 Project Operational Emissions | 4.10-15 |
| 4.10-6 Predicted Maximum 1-Hour and 8-Hour Carbon Monoxide Concentrations (in PPM) | 4.10-17 |
| 4.10-7 Air Quality Residual Impact Summary Table | 4.10-23 |
| 4.11-1 Typical Sound Levels Measured in the Environment and Industry | 4.11-3 |
| 4.11-2 Summary of the Public Health Effects of Community Noise and the Noise Levels at Which They Can Occur | 4.11-4 |
| 4.11-3 Modeled Existing L_{dn} 's at Receptors 50 and 100 Feet from Roadway Centerlines and Distances to Selected L_{dn} Contours | 4.11-6 |
| 4.11-4 Maximum Allowable Noise Exposure Transportation Noise Sources | 4.11-12 |
| 4.11-5 Performance Standards for Non-Transportation Noise Sources or Projects Affected by Non-Transportation Noise Sources | 4.11-13 |
| 4.11-6 Construction Equipment Noise Levels Before and After Mitigation (dBA) . | 4.11-15 |
| 4.11-7 L_{dn} 's at Receptors 50 and 100 feet from Roadway Centerlines (dBA) | 4.11-17 |
| 4.11-8 Distances from Centerline to Selected L_{dn} Contours | 4.11-19 |
| 4.11-9 Noise Impact Residual Summary Table | 4.11-26 |

LIST OF TABLES (Continued)

| <u>Table</u> | <u>Page</u> |
|---|-------------|
| 4.12-1 City of Roseville Water Entitlement | 4.12-2 |
| 4.12-2 City of Roseville Drought Stages and Drought Response Measures | 4.12-4 |
| 4.12-3 City of Roseville Estimated Solid Waste Generation (1990-2005) | 4.12-13 |
| 4.12-4 Roseville Joint Union High School District High School Capacities and Enrollment | 4.12-19 |
| 4.12-5 Dry Creek Joint Elementary School District Capacities and Enrollment . . . | 4.12-19 |
| 4.12-6 Roseville City School District School Capacities and Enrollment | 4.12-20 |
| 4.12-7 Roseville Joint Union School District Student Generation Rates | 4.12-31 |
| 4.12-8 Dry Creek Joint Elementary School District Student Generation Rates . . . | 4.12-31 |
| 4.12-9 Roseville City School District Student Generation Rates | 4.12-31 |
| 4.12-10 Phase I Water Demand | 4.12-34 |
| 4.12-11 Phase I North Roseville Specific Plan Wastewater Generation in Conveyance System | 4.12-42 |
| 4.12-12 Phase I North Roseville Specific Plan Wastewater Generation | 4.12-45 |
| 4.12-13 Phase I North Roseville Specific Plan Solid Waste Generation | 4.12-47 |
| 4.12-14 Phase I North Roseville Specific Plan Annual Electric Demand | 4.12-48 |
| 4.12-15 Phase I North Roseville Specific Plan Annual Natural Gas Demand | 4.12-49 |
| 4.12-16 Phase I North Roseville Specific Plan Student Generation in the Roseville Joint Union High School District | 4.12-50 |
| 4.12-17 North Roseville Specific Plan Student Generation in the Roseville City School District | 4.12-51 |
| 4.12-18 Phase I Dedicated Park and Open Space | 4.12-54 |
| 4.12-19 Full Project North Roseville Specific Plan Water Demand | 4.12-56 |
| 4.12-20 Full Project North Roseville Specific Plan Wastewater Generation in Conveyance System | 4.12-60 |
| 4.12-21 Full Project North Roseville Specific Plan Wastewater Generation | 4.12-61 |
| 4.12-22 Full Project North Roseville Specific Plan Solid Waste Generation | 4.12-63 |
| 4.12-23 Full Project North Roseville Specific Plan Annual Electric Demand | 4.12-64 |
| 4.12-24 Full Project North Roseville Specific Plan Annual Natural Gas Demand . . | 4.12-65 |
| 4.12-25 Full Project North Roseville Specific Plan Student Generation in the Roseville Joint Union High School District | 4.12-66 |
| 4.12-26 Full Project North Roseville Specific Plan Student Generation in the Dry Creek Joint Elementary School District | 4.12-67 |
| 4.12-27 Full Project North Roseville Specific Plan Student Generation in the Roseville City School District | 4.12-68 |
| 4.12-28 Full Project Designated Park and Open Space | 4.12-70 |
| 4.12-29 Public Services and Utilities Residual Impact Summary Table | 4.12-74 |
| 5.2-1 Cumulative Assumptions | 5-2 |
| 5.2-2 Summary of Intersections Operating at Unacceptable Levels | 5-15 |

LIST OF TABLES (Continued)

| <u>Table</u> | | <u>Page</u> |
|--------------|---|-------------|
| 6-1 | Summary of Alternative Land Use Assumptions by Property | 6-4 |
| 6-2 | Comparison of Alternatives to Proposed Project | 6-5 |
| 6-3 | Alternative 3 Light Industrial Plus Rezone of Urban Reserve | 6-21 |
| 6-4 | Alternative 4 Lower Density Alternative | 6-34 |
| 6-5 | Alternative 6 Level of Service Comparison to Proposed Project | 6-53 |

LIST OF FIGURES

| <u>Figure</u> | <u>Page</u> |
|--|-------------|
| 3-1 Regional Location Map | 3-2 |
| 3-2 Surrounding Land Uses | 3-3 |
| 3-3 Property Ownership Map | 3-8 |
| 3-4 Proposed Land Use Plan | 3-11 |
| 3-5 Parks and Recreation Master Plan | 3-16 |
| 3-6 Proposed Plan Area Circulation Master Plan | 3-18 |
| 3-7 Zoning Designations | 3-24 |
| 4.1-1 Surrounding Land Uses | 4.1-3 |
| 4.1-2 Placer County Land Uses | 4.1-5 |
| 4.1-3 Farmland Classification | 4.1-9 |
| 4.1-4 Surrounding Land Uses | 4.1-15 |
| 4.1-5 Existing Zoning | 4.1-16 |
| 4.3-1 Geologic Units | 4.3-3 |
| 4.3-2 Mineral Resource Zones | 4.3-5 |
| 4.3-3 Regional Fault and Location Map | 4.3-7 |
| 4.3-4 Faults Within 100 Kilometers of Project Site | 4.3-8 |
| 4.3-5 Soils Map | 4.3-11 |
| 4.4-1 Plan Area Watersheds | 4.4-2 |
| 4.4-2 Plan Area Floodplain | 4.4-5 |
| 4.4-3 Locations of Estimated Flood Elevations and Peak Flows for Pleasant Grove Creek | 4.4-7 |
| 4.4-4 Intermittent Drainages in the Plan Area | 4.4-10 |
| 4.4-5 Preliminary Potential Detention Basin Sites | 4.4-26 |
| 4.5-1 Existing Habitats in Plan Area | 4.5-2 |
| 4.7-1 Key Map of Photographs | 4.7-2 |
| 4.7-2 Oak Woodlands (Mourier 140) | 4.7-3 |
| 4.7-3 Vernal Pools (Woodcreek North) | 4.7-3 |
| 4.7-4 Grasslands Typical of the Plan Area and Vicinity | 4.7-5 |
| 4.7-5 Illustration of Plan Area Characteristics | 4.7-6 |
| 4.7-6 Cattle and Vehicle Erosion of Pleasant Grove Creek (Diamond Creek) | 4.7-7 |
| 4.7-7 Cattail Filled Drainage Ditch (Woodcreek West) | 4.7-7 |
| 4.7-8 Vernal Pools and Wetlands (Woodcreek North) | 4.7-8 |
| 4.7-9 High-Voltage Transmission Lines (Woodcreek West) | 4.7-8 |
| 4.7-10 View of Hewlett Packard | 4.7-10 |
| 4.8-1 Known Hazardous Materials or Public Safety Areas of Interest | 4.8-3 |
| 4.8-2 Authorized Hazardous Materials Transportation Routes | 4.8-8 |

LIST OF FIGURES (Continued)

| <u>Figure</u> | | <u>Page</u> |
|---------------|---|-------------|
| 4.9-1 | Existing Arterial/Collector Roadway System | 4.9-4 |
| 4.9-2 | Existing Daily Traffic Volumes | 4.9-9 |
| 4.9-3 | Existing Transit Routes | 4.9-13 |
| 4.9-4 | Existing Bike Routes | 4.9-16 |
| 4.9-5 | Existing Truck Routes | 4.9-18 |
| 4.9-6 | Existing Railroad Facilities | 4.9-20 |
| 4.9-7 | Required Roadway Improvements under 2010 Market Scenario | 4.9-29 |
| 4.9-8 | Daily Traffic Volumes under 2010 Market Conditions with the Proposed Project | 4.9-34 |
| 4.10-1 | Carbon Monoxide Modeled Intersection Locations | 4.10-13 |
| 4.11-1 | Noise Monitoring Locations | 4.11-9 |
| 4.12-1 | Reclaimed Water Lines | 4.12-7 |
| 4.12-2 | Fire Protection Facilities | 4.12-11 |
| 4.12-3 | Existing and Proposed Electric Lines | 4.12-16 |
| 4.12-4 | Elementary School District Boundaries and Proposed School Sites | 4.12-17 |
| 4.12-5 | Proposed Water Lines | 4.12-39 |
| 4.12-6 | Proposed Wastewater Lines | 4.12-43 |
| 5.2-1 | Projected Daily Traffic Volumes under Cumulative Conditions | 5-14 |
| 6-1 | Light Industrial Alternative | 6-11 |
| 6-2 | Daily Traffic Volumes under 2010 Market Conditions with Buildout of Light Industrial | 6-16 |
| 6-3 | Alternative 3: Light Industrial /Rezone of Phase I Urban Reserve Alternative | 6-22 |
| 6-4 | Alternative 4: Daily Traffic Volumes | 6-28 |
| 6-5 | Alternative 4: Lower Density Alternative | 6-33 |
| 6-6 | Alternative 4: Daily Traffic Volumes (Phase 1) | 6-39 |
| 6-7 | Alternative 4: Daily Traffic Volumes (Full Project) | 6-40 |
| 6-8 | Alternative 4: Off-site Alternative Location | 6-46 |
| 6-9 | Alternative 6 Daily Traffic Volumes | 6-52 |

1. INTRODUCTION

1.0 INTRODUCTION

1.1 PURPOSE OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

This Draft Environmental Impact Report (DEIR) has been prepared for the City of Roseville, pursuant to the California Environmental Quality Act (CEQA) of 1970 (as amended), which is acting as lead agency for the preparation of environmental documentation for the North Roseville Specific Plan (NRSP). The NRSP (Proposed Project) evaluated in this EIR consists of two phases of development. Phase I includes approximately 736 acres located west of Foothills Boulevard and bisected by the recent westward extension of Blue Oaks Boulevard; Phase II consists of approximately 654 acres on two discontinuous parcels located west of Phase I. The DEIR analyzes the development of Phase I only and development of the Full Project (Phases I and II combined). The analysis of these two scenarios will allow decision makers the opportunity to identify the environmental impacts associated with development of Phase I and the Full Project. This DEIR evaluates the direct, indirect, and cumulative impacts of the planning, construction, and operation of both development scenarios using the most current information.

A specific plan for the development of the North Roseville property has been prepared for the development of a mixed-use, planned community and necessary infrastructure, as well as the preservation of some areas as open space. This EIR will be used for the following approvals necessary for implementation of Phase I of the Proposed Project:

- A General Plan Amendment to change land use from urban reserve and light industrial to low-, medium-, and high-density residential, community commercial, business-professional, parks and recreation, open space and public/quasi-public uses;
- A General Plan Amendment to increase the housing unit allocation beyond 39,200;
- Specific Plan Amendment to adopt the NRSP;
- Rezone from light industrial and urban reserve to uses consistent with the NRSP;
- Large Lot Tentative Map to create parcels that conform with specific plan parcels;
- NRSP Design Guidelines;
- Development Agreements;
- U.S. Army Corps of Engineers Section 404 permit, California Regional Water Quality Control Board Certification, Department of Fish and Game Streambed Alteration

Agreement; Federal and State Endangered Species Act Take Permits; and State Water Resources Control Board Stormwater Discharge Permit;

Phase II of the Proposed Project would require the above approvals, and:

- Annexation of Fiddymment Road adjacent to the project site (Phase II); and
- Abandonment of a portion of Baseline Road due to realignment (Phase II).

This EIR will also serve as the basis for the environmental review for subsequent approvals, such as small-lot subdivision maps and public improvements.

The NRSP will herein be referred to as the Proposed Project. In addition, geographic boundaries of the NRSP Area will be referred to as the Plan Area throughout this document, except as otherwise noted. A detailed project description is provided in Chapter 3. This EIR will also serve as the basis for the environmental review for subsequent approvals, such as small-lot subdivision maps and public improvements.

The City currently has 39,200 dwelling units within its General Plan. It is assumed that a portion of the units needed for this project will come from within the existing unit pool. However, it is not known exactly how many units will come from the existing General Plan unit pool; this is a decision that will be made when the project goes forward for approval. For the purpose of analysis in the EIR, all project units are considered new units (additive to the 39,200) to achieve a conservative "worst case" analysis.

1.2 SCOPE OF THE EIR

This DEIR evaluates the existing environmental resources within the Plan Area, analyzes potential impacts on those resources due to the Proposed Project, and identifies mitigation measures to reduce significant impacts. The NRSP developed for the Proposed Project serves as the basis for the environmental analysis presented in the DEIR. The effects analyzed span several subject areas, including land use, population, employment and housing, soils, geology and seismicity, hydrology and water quality, biological resources, cultural resources, aesthetics and visual resources, hazardous materials, transportation and circulation, air quality, noise, and public services and utilities. The evaluation of these effects is presented on a resource-by-resource basis in Chapter 4, Environmental Analysis, in Sections 4.1 through 4.12. Each section is divided into three parts: Environmental Setting, Regulatory Setting, and Impacts and Mitigation Measures. In addition to these discussions in each section, those impacts that cannot be mitigated to a level that is less than significant (and are therefore considered significant unavoidable adverse impacts) are discussed separately in Chapter 5.4.

Other CEQA-related issues such as cumulative and growth-inducing impacts resulting from implementation of the Proposed Project are analyzed in Chapters 5.2 and 5.3 respectively. In addition, six alternatives, including a No Project alternative, are analyzed in this DEIR. These alternatives, and others considered and eliminated before detailed analysis, are discussed in Chapter 6, Project Alternatives.

1.3 CEQA PROCESS

As provided in the CEQA Guidelines, public agencies are charged with the duty to avoid or minimize significant environmental damage where feasible. In discharging this duty, the public agency has an obligation to balance a variety of public objectives, including economic, environmental and social issues. The EIR is basically an informational document that informs public agency decision makers and the general public of the significant environmental effects of a proposed project. An EIR must identify possible means to minimize the significant effects and describe reasonable alternatives to the project. The lead agency, in this case the City of Roseville, is required to consider the information in the EIR along with any other available information in making its decision. The basic informational requirements for an EIR include discussions of the environmental setting, environmental impact, mitigation measures, alternatives, significant irreversible changes, growth-inducing impacts and cumulative impacts.

The Notice of Preparation (NOP) for this DEIR was released November 6, 1996. Copies of the NOP and comment letters received are included in Appendix A. This DEIR and all documents referenced therein are available for public review at the City of Roseville Planning Department, 316 Vernon Street #104; at the Roseville City Clerk's office, 311 Vernon Street; at the City of Roseville Main Library, 225 Taylor Street; and at the Maidu Branch Library, 1530 Maidu Drive, all in Roseville. The distribution list for this DEIR is contained in Appendix B.

Public hearings regarding the information contained in this DEIR will be held during the 45-day public comment period. This DEIR was publicly circulated on May 15, 1997 for a 45-day period of public review and comment. This period ends June 30, 1997.

Comments received during the comment period and the public hearings will be addressed in the Final EIR (FEIR). The FEIR will be reviewed by the Roseville City Council for certification in accordance with CEQA and the City's Guidelines. Written findings of fact for each significant environmental impact identified in the EIR will be prepared by the lead agency to:

- Determine if the Proposed Project has been changed to avoid or substantially reduce the magnitude of the impact;
- Find that changes to the Proposed Project are within another agency's jurisdiction, and such changes have been or should be adopted; and
- Find that specific economic, social, or other considerations make mitigation measures or Proposed Project alternatives infeasible.

The findings of fact prepared by the lead agency must be based on substantial evidence in the administrative record and must include an explanation that bridges the gap between evidence in the record and the conclusions required by CEQA.

Based on these findings, the lead agency will also prepare a Statement of Overriding Considerations (Statement) as part of the project approval process. If the decision-making body elects to proceed with a project that would have significant impacts, then a statement explaining

the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

1.4 LEVELS OF SIGNIFICANCE

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance" (CEQA Guidelines, 1995). Definitions of significance vary with the physical conditions affected, and the setting in which the change occurs. The CEQA Guidelines set forth physical impacts that trigger the requirement to make "mandatory findings of significance" (CEQA Guidelines, 1995).

For all environmental issues, specific standards of significance are identified.

Where the "substantial" effect of an impact is not so identified in the CEQA Guidelines, criteria for evaluating the significance of potential impacts were identified and transmitted to the City of Roseville for review. Where explicit quantification of significance is identified, such as a violation of an ambient air quality standard, this quantity is used to assess the level of significance of a particular impact in this DEIR.

For less easily quantifiable impacts, events or occurrences that would be regarded as significant or potentially significant were identified. For example, growth-inducing impacts would be identified as significant if the project results in a level, rate, or character of growth that (among other criteria) exceeds capacity of existing infrastructure and services to adequately support it. A criterion for determining the level of significance of the loss of a particular habitat would be that habitat's importance to rare or endangered species and/or whether the habitat itself has become depleted within the region.

This assessment of levels of significance promotes consistent evaluation of impacts for all alternatives considered.

1.5 HOW TO USE THIS REPORT

This report includes six principal parts, Summary of Impacts and Mitigation Measures, Project Description, Environmental Analysis (Setting, Impacts, and Mitigation Measures), Other CEQA Considerations, Project Alternatives, and Appendices.

The **Summary of Impacts and Mitigation Measures** presents an overview of the results and conclusions of the environmental evaluation. This section identifies project impacts and available mitigation measures for use by the City in reviewing the project and establishing conditions under which the project may be developed.

The **Project Description** includes a discussion of the location of the Plan Area and proposed plans for development of the Plan Area.

The **Environmental Analysis** includes a topic-by-topic analysis of impacts that would or could result from implementation of the NRSP. The results of field visits, data collection and review and agency contacts are presented in the text.

Other CEQA Considerations includes a discussion of issues required by CEQA: unavoidable adverse impacts, irreversible environmental changes, growth inducement, and cumulative impacts.

The **Project Alternatives** section includes an assessment of alternative methods for accomplishing the basic objectives of the Proposed Project. This assessment, required under CEQA, must provide adequate information for decision makers to make a reasonable choice between alternatives based on the environmental aspects of the Proposed Project and alternatives.

The **Appendices** contain a number of reference items providing support and documentation of the analysis performed for this report.

2. SUMMARY OF IMPACTS AND MITIGATION MEASURES

2.0 SUMMARY OF ENVIRONMENTAL EFFECTS

2.1 OVERVIEW OF THE PROPOSED PROJECT

This DEIR evaluates the environmental impacts of the proposed NRSP (Proposed Project) located in the City of Roseville.

The Proposed Project evaluated in this DEIR consists of two phases of development. Phase I includes approximately 736 acres located west of Foothills Boulevard and Phase II consists of approximately 654 acres on two discontinuous parcels located west of Phase I. The DEIR analyzes the development of Phase I only and development of the Full Project (Phases I and II combined). The analysis of these two scenarios will allow decision makers the opportunity to identify the environmental impacts associated with development of Phase I and the Full Project. The total Plan Area encompasses approximately 1,390 acres. The primary planned land uses include detached single-family residential, multi-family residential, commercial, business professional, schools, parks and open space areas. The Phase I development scenario includes 2,523 dwelling units consisting of: 1,848 low and medium-density residential units, 275 high-density residential units and 400 attached dwelling units on an approximately fifty-acre retirement community offering a range of supportive and health services, 37.7 acres of commercial uses and 4.4 acres devoted to business-professional development, three school sites for a total of 38.3 acres, 79.2 acres of parks, and 81.5 acres dedicated for open space.

The Full Project includes a total of 3,977 low- and medium-density residential units, 1,121 high-density residential units (including the 400-unit retirement community), 44.6 acres of commercial, 4.4 acres of business-commercial, 48.3 acres for four school sites, 108.8 acres of parks, and 193.2 acres of open space.

This summary provides an overview of the analysis contained in Chapter 4, Environmental Analysis. This summary also includes discussions of: a) effects found to be less than significant; b) potential areas of controversy; c) significant impacts; d) mitigation measures to avoid or reduce identified significant impacts; e) unavoidable significant impacts; and f) alternatives to the project. Table 2-1 summarizes the analysis contained in Chapter 4, Environmental Analysis.

2.2 EFFECTS FOUND TO BE LESS THAN SIGNIFICANT

The City of Roseville prepared an Initial Study of Environmental Impacts for the Proposed Project on November 5, 1996. The NOP was released on November 6, 1996, and was circulated for thirty days. A full copy of the Initial Study and NOP can be found in Appendix A.

As shown in Table 2-1, a number of project impacts were found to be less than significant, requiring no mitigation. These include the conversion of agricultural land, conflicts with adjacent land uses, increases in population, employment and housing supply, construction in an area of seismic activity, loss of mineral resources, changes in topography due to grading, increase in storm runoff, interference with groundwater recharge, decreased water quality, loss of oak woodland and riparian habitat, valley elderberry longhorn beetle habitat, reduction of visual quality due to the reduction of oak and riparian habitats, visual incompatibility between adjacent land uses, increased light and glare, exposure of people to odors or toxic air contaminants, increased carbon monoxide emissions, exposure to traffic noise, increased demand on the water supply and distribution system, wastewater facilities, solid waste disposal, schools, libraries, parks, energy, and cable and television services.

In the course of drafting the EIR for this project, it was determined that numerous other identified impacts could be reduced to a less-than-significant level with implementation of the proposed mitigation measures which are described herein.

2.3 ENVIRONMENTAL IMPACTS AND MITIGATION

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Implementation of the Proposed Project would result in significant impacts on these resources.

This EIR discusses mitigation measures that could be implemented by the City and/or the project applicant to reduce potential adverse impacts to a level that is considered less than significant. Such mitigation measures are noted in this report and are found in the following sections: Soils, Geology and Seismicity; Hydrology and Water Quality; Biological Resources; Cultural Resources; Hazardous Materials and Public Safety; Transportation and Circulation; Air Quality; Noise; and Public Services and Utilities. The Applicant has worked with the City to anticipate and mitigate potential adverse environmental effects of the Proposed Project; these are identified in the sections which discuss each resource area. If an impact is determined to be significant or potentially significant, applicable mitigation measures are identified as appropriate. These mitigation measures are also summarized in Table 2-1. Residual significance indicates the remaining level of significance after implementation of the mitigation measures. An impact which remains significant after mitigation is considered an unavoidable adverse impact of the Proposed Project. The mitigation measures presented in the EIR will form the basis of the Mitigation Monitoring Program.

Project-specific impacts that would be significant and unavoidable would occur in the following areas: Biological Resources, Visual Resources, Air Quality, and Noise.

2.4 ALTERNATIVES TO THE PROPOSED PROJECT

The alternatives to the proposed NRSP analyzed in this Draft EIR are:

- **Alternative 1, No Project/No Development**, which assumes that no development occurs on the project site;
- **Alternative 2, No Project/Existing Zoning Only**, which assumes the existing light industrial designations are developed, but that no development occurs in the Urban Reserve areas;
- **Alternative 3, Existing Zoning and Urban Reserve Development**, which assumes that the existing light industrial designations are retained, and that the urban reserve contained in Phase I is developed with the residential, commercial and public uses identified for Phase I (Phase II would not be developed);
- **Alternative 4, Lower-Density**, which provides fewer residential units, but on the same acreage as the Proposed Project;
- **Alternative 5, Off Site**, which assumes that the same type and level of development proposed in the Full Project occurs in the East Plan Area (Stoneridge); and
- **Alternative 6, Junction Boulevard Realignment**, which assumes that Junction Boulevard is extended in a straight line to form a "T" intersection with Fiddymment Road.

2.5 POTENTIAL AREAS OF CONCERN OR UNRESOLVED ISSUES

The major areas of potential controversy identified through the environmental evaluation process stem from the following:

- This would be a mixed-use development project in the City's Light Industrial and Urban Reserve area. For purposes of the EIR, it requires a General Plan Amendment to increase land use allocations by an additional 5,098 residential units. For Phase I, this increased allocation is necessary only if existing allocations are not used. Growth from this additional allocation, and the potential for the Proposed Project to induce additional growth in the area is a concern.
- The Proposed Project would increase demand on numerous city services. Implementation of the Proposed Project would be dependent upon acquisition of adequate water transmission, provision of necessary transportation and other public services infrastructure and other services not currently existing.
- The Proposed Project would generate additional traffic, which could increase congestion on local roadways.

- Portions of the Proposed Project that would be developed in residential uses are adjacent to existing light industrial facilities as well as areas that are zoned light industrial, which could result in incompatibilities due to industrial operations.
- The Proposed Project would result in the loss of annual grasslands, oak woodlands and riparian areas, which provide habitat for special-status plant and animal species.

2.6 UNAVOIDABLE ADVERSE EFFECTS

The Applicant has worked with the City to anticipate and mitigate potential adverse environmental effects of the Proposed Project; where applicable compliance with appropriate City standards and policies are used to mitigate potential impacts. A series of mitigation measures are noted when more than one mitigation measure may be required to reduce the impact to a level that is less than significant. Residual significance indicates the remaining levels of significance after implementation of mitigation measures. When an impact is considered less than significant no mitigation is required, therefore no reference to residual significance is necessary. An impact which remains significant after mitigation is considered an unavoidable adverse impact of the Proposed Project. Both development scenarios would result in the same number of unavoidable adverse impacts, which would remain significant or potentially significant after mitigation:

- short-term loss of oak trees;
- loss of wildlife habitat;
- potential loss of vernal pools, vernal pool fairy shrimp, and vernal pool plants;
- change in the undeveloped landscape character by the introduction of urban development structures;
- increases in regional air pollution;
- inconsistency with regional air quality attainment plans; and
- short-term noise levels during construction.

SUMMARY TABLE

Information in the following table, Table 2-1, Summary of Environmental Impacts, has been organized to correspond with environmental issues discussed in Chapter 4. The summary table is arranged in four columns:

- 1) Environmental impacts ("Impact"),
- 2) Level of significance without mitigation ("Significance"),
- 3) Mitigation measures ("Mitigation Measure"),
- 4) The level of significance after implementation of mitigation measures ("Residual Significance").

A series of mitigation measures are noted where more than one mitigation measure may be required to reduce the impact to a less-than-significant level. The EIR assumes that applicable City General Plan Policies and Improvement Standards would be implemented, so they are not identified as mitigation measures.

SUMMARY OF IMPACTS BY ALTERNATIVES

Table 2-2 provides a summary, by subject area, of the severity of impacts of each alternative, relative to the Proposed Project.

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|---------------------|--|-----------------------|--------------------|-----------------------|
| 4.1 Land Use | | | | |
| 4.1-1 (A AND B) | Land use conversion. | Less than significant | None required | Less than significant |
| 4.1-2 (A AND B) | Agricultural land conversion. | Less than significant | None required | Less than significant |
| 4.1-3 (A AND B) | Incompatibility of proposed land uses with the adjoining DWSP, NWRSP and Hewlett-Packard Master Plan. | Less than significant | None required | Less than significant |
| 4.1-4 (A AND B) | Incompatibility of proposed land uses with the adjoining agricultural areas in Placer County. | Less than significant | None required | Less than significant |
| 4.1-5 (A AND B) | Incompatibility of proposed land uses with the adjoining Sunset Community Plan area. | Less than significant | None required | Less than significant |
| 4.1-6 (A AND B) | Incompatibility of proposed land uses with the nearby existing and planned light industrial uses in the City of Roseville. | Less than significant | None required | Less than significant |
| 4.1-7 (A AND B) | Incompatibility between schools and surrounding uses. | Less than significant | None required | Less than significant |
| 4.1-8 (A AND B) | Incompatibility between public/institutional and residential adjacent land uses. | Less than significant | None required | Less than significant |
| 4.1-9 (A AND B) | Incompatibility between County landfill operations and residential adjacent land uses. | Less than significant | None required | Less than significant |
| 4.1-10 (A AND B) | Consistency with City General Plan | Less than significant | None required | Less than significant |
| 4.1-11 (B) | Annexation of 7.6 acres of Placer County land under agricultural uses to the City of Roseville for Fiddymont Road rights-of-way. (Phase II only) | Less than significant | None required | Less than significant |

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|---|--|-------------------------|--|-----------------------|
| 4.2 Population, Employment and Housing | | | | |
| 4.2-1 (A AND B) | Increased population within the City of Roseville during project construction. | Less than significant | None required | Less than significant |
| 4.2-2 (A AND B) | Increased population within the City of Roseville after construction of the Proposed Project. | Less than significant | None required | Less than significant |
| 4.2-3 (A AND B) | Changes in the jobs/housing balance. | Less than significant | None required | Less than significant |
| 4.2-4 (A AND B) | Ability to meet City of Roseville's affordable housing goals. | Less than significant | None required | Less than significant |
| 4.3 Soils, Geology and Seismicity | | | | |
| 4.3-1 (A AND B) | Construction of structures in an area of potential seismic activity. | Less than significant | None required | Less than significant |
| 4.3-2 (A AND B) | Potential failure of structures and infrastructure facilities due to construction on soils that exhibit slow permeability, low strength and high shrink-swell potential. | Significant | Mitigation Measure 4.3-1 (Comply with site-specific geotechnical evaluation) | Less than significant |
| 4.3-3 (A AND B) | Grading activities could cause slope instability along steep stream channels and increased erosion in the Plan Area. | Significant | Mitigation Measure 4.3-1 (Comply with site-specific geotechnical evaluation) | Less than significant |
| 4.3-4 (A AND B) | Inaccessibility to potential mineral resources located within the Plan Area. | Less than significant | None required | Less than significant |
| 4.3-5 (A AND B) | Topographic changes due to grading activities. | Less than significant | None required | Less than significant |
| 4.4 Hydrology and Water Quality | | | | |
| 4.4-1 (A AND B) | Development located in the designated 100-year floodplain could obstruct flood flows and exacerbate existing localized flooding. | Potentially significant | Mitigation Measure 4.4-1 (Design and site structures and amenities within parks and open space designations to prevent flood flow obstruction, and demonstrate no off-site increase in water surface elevation from such features) | Less than significant |

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|---------------------------------|--|--|--|--|
| 4.4-2 (A AND B) | Increase in the rate of stormwater runoff. | Less than significant | None required | Less than significant |
| 4.4-3 (A) | Increase in on-site and off-site flood elevations. | Less than significant | None required | Less than significant |
| 4.4-3 (B) | Increase in on-site and off-site flood elevations. | Potentially significant | Mitigation Measure 4.4-2 (Ensure that regional retention facilities are adequate to contain runoff volumes) | Less than significant |
| 4.4-4 (A AND B) | Localized alteration of drainage patterns. | Less than significant | None required | Less than significant |
| 4.4-5 (A AND B) | Interference with groundwater recharge potential. | Less than significant | None required | Less than significant |
| 4.4-6 (A AND B) | Degraded water quality resulting from increased erosion and sedimentation during construction. | Less than significant | None required | Less than significant |
| 4.4-7 (A AND B) | Degraded water quality resulting from increased erosion and stormwater runoff. | Less than significant | None required | Less than significant |
| 4.5 Biological Resources | | | | |
| 4.5-1 (A AND B) | Loss of oak trees of greater than 6" dbh. | Short-term significant, long-term, less than significant | None identified | Short-term significant, long-term, less than significant |
| 4.5-2 (A AND B) | Loss of oak woodland and mixed riparian habitat. | Less than significant | None required | Less than significant |
| 4.5-3 (A AND B) | Loss of vernal pools, seasonal wetlands and other jurisdictional waters of the U.S. | Significant | Mitigation Measure 4.5-1 (Preserve and construct vernal pools or purchase credits in an approved wetlands mitigation bank) | Potentially significant |

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|--|--|-------------------------|--|-------------------------|
| 4.5-4 (A AND B) | Loss of wildlife habitat. | Significant | Mitigation Measure 4.5-1 (Preserve and construct vernal pools or purchase credits in an approved wetlands mitigation bank) | Significant |
| 4.5-5 (A AND B) | Disturbance to wildlife and wildlife habitat during construction. | Significant | Mitigation Measure 4.5-2 (Implement construction protocols) | Less than significant |
| 4.5-6 (A AND B) | Substantial interference with the movement of resident and migratory wildlife species. | Less than significant | None required | Less than significant |
| 4.5-7 (A AND B) | Loss of special-status plant species occurring in vernal pools. | Potentially significant | Mitigation Measure 4.5-3 (Incorporate soil and seed bank salvage in construction of vernal pools) | Potentially significant |
| 4.5-8 (A AND B) | Loss of federal threatened vernal pool fairy shrimp. | Significant | Mitigation Measure 4.5-3 (Incorporate soil and seedbank salvage in construction of vernal pools) | Potentially significant |
| 4.5-9 (A AND B) | Potential disturbance of Swainson's hawk and other legally-protected raptor nests. | Significant | Mitigation Measure 4.5-4 (Conduct pre-construction nest survey and implement appropriate restrictions) | Less than significant |
| 4.5-10 (A AND B) | Potential loss of valley elderberry longhorn beetle. | Less than significant | None required | Less than significant |
| 4.6 Cultural Resources | | | | |
| 4.6-1 (A AND B) | Damage or destroy unidentified cultural resources. | Significant | Mitigation Measure 4.6-1 (Cease work and consult a qualified archaeologist) | Less than significant |
| 4.6-2 (A AND B) | Damage or destroy recorded prehistoric sites. | Significant | Mitigation Measure 4.6-2(a) (Conduct archaeological testing), 4.6-2(b) (Preserve or record sites, consistent with CEQA Guidelines) | Less than significant |
| 4.7 Aesthetics and Visual Resources | | | | |
| 4.7-1 (A AND B) | Conversion of undeveloped landscape to urban development. | Significant | None identified | Significant |
| 4.7-2 (A AND B) | Decrease in visual quality due to removal of riparian vegetation. | Less than significant | None required | Less than significant |

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|--|---|-------------------------|---|------------------------------|
| 4.7-3 (A AND B) | Visual incompatibility between residential areas and adjacent light industrial uses. | Less than significant | None required | Less than significant |
| 4.7-4 (A AND B) | Disturbance of residents due to artificial light and glare. | Less than significant | None required | Less than significant |
| 4.8 Hazardous Materials and Public Safety | | | | |
| 4.8-1 (A AND B) | Increased potential for accidental release or spill of hazardous materials. | Less than significant | None required | Less than significant |
| 4.8-2 (A AND B) | Increased risk of contamination from improper disposal of household hazardous wastes. | Less than significant | None required | Less than significant |
| 4.8-3 (A AND B) | Existing or unknown hazards related to past uses within or adjacent to the Plan Area. | Potentially significant | Mitigation Measure 4.8-1 (Remediate site hazards, if discovered) | Less than significant |
| 4.8-4 (A AND B) | Potential effects of electromagnetic fields (EMFs). | Less than significant | None required | Less than significant |
| 4.8-5 (A AND B) | Increased fire potential. | Potentially significant | Mitigation Measure 4.8-2(a) (Clear areas slated for construction activities of materials that could serve as fire fuel prior to initiating these activities); Mitigation Measure 4.8-2(b) (Require spark-generating construction equipment to be equipped with manufacturer's recommended spark arresters) | Less than significant |
| 4.9 Transportation and Circulation | | | | |
| 4.9-1 (A) | Increased traffic volumes on City of Roseville roadways. | Less than significant | None required | Less than significant |
| 4.9-1 (B) | Increased traffic volumes on City of Roseville roadways. | Significant | Mitigation Measure 4.9-2 (Amend the transportation CIP to provide roadway improvements) | Less than significant |
| 4.9-2 (A AND B) | Increased demand for transit service (both bus and light rail). | Significant | Mitigation Measure 4.9-1 (Update Long-Range Transit Master Plan) | Less than significant |

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|-------------------------|---|------------------------|---|-----------------------|
| 4.9-3 (A AND B) | Increased demand for bicycle circulation facilities. | Less than significant | None required | Less than significant |
| 4.9-4 (A AND B) | Increased traffic volumes on Placer County roadways. | Less than significant | None required | Less than significant |
| 4.9-5 (A AND B) | Increased traffic volumes on City of Rocklin roadways. | Less than significant | None required | Less than significant |
| 4.9-6 (A AND B) | Increased traffic volumes on Sutter County roadways. | Less than significant | None required | Less than significant |
| 4.10 Air Quality | | | | |
| 4.10-1 (A AND B) | Short-term air pollutant emissions during construction. | Short-term significant | Implement Mitigation Measure 4.10-1(a)(Provide dust control), (b)(Properly maintain construction equipment) | Less than significant |
| 4.10-2 (A AND B) | Project-related operational air pollutant emissions (ROG, NO _x , PM ₁₀). | Significant | None identified | Significant |
| 4.10-3 (A AND B) | Increases of CO concentrations at intersections. | Less than significant | None required | Less than significant |
| 4.10-4 (A AND B) | Exposure of Plan Area residents to minor amounts of odors. | Less than significant | None required | Less than significant |
| 4.10-5 (A AND B) | Inconsistency with Air Quality Attainment Plans. | Significant | None available | Significant |
| 4.10-6 (A AND B) | Exposure of residents to criteria air pollutants generated by nearby stationary sources. | Less than significant | None required | Less than significant |
| 4.10-7 (A AND B) | Exposure of residential areas to toxic air contaminants generated by stationary sources. | Less than significant | None required | Less than significant |
| 4.11 Noise | | | | |
| 4.11-1 (A AND B) | Temporary increases in noise levels due to earthmoving and general construction activities. | Significant | None available | Significant |

TABLE 2-1
SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|---|---|-----------------------|--|------------------------------|
| 4.11-2 (A AND B) | Traffic noise level increases along roadways near off-site residential areas. | Less than significant | None required | Less than significant |
| 4.11-3 (A AND B) | Exposure of project receptors to transportation noise. | Significant | Mitigation Measure 4.11-1 (Provide appropriate noise attenuation e.g., barriers and/or setbacks, based on site-specific acoustical analyses) | Less than significant |
| 4.11-4 (A AND B) | Exposure of project receptors to non-transportation-source noise. | Significant | Mitigation Measure 4.11-2 (Conduct noise analysis to specify sound wall design) | Less than significant |
| 4.12 Public Services and Utilities | | | | |
| 4.12-1 (A AND B) | Increased demand for domestic water. | Less than significant | None required | Less than significant |
| 4.12-2 (A AND B) | Increased demand for domestic water conveyance | Less than significant | None required | Less than significant |
| 4.12-3 (A AND B) | Decreased water supply during drought periods. | Less than significant | None required | Less than significant |
| 4.12-4 (A AND B) | Increased demand for domestic water treatment. | Significant | Mitigation Measure 4.12-1 (Restrict development until water treatment capacity increases) | Less than significant |
| 4.12-5 (A AND B) | Increased demand on water distribution system. | Less than significant | None required | Less than significant |
| 4.12-6 (A AND B) | Residual discharges to Dry Creek. | Less than significant | None required | Less than significant |
| 4.12-7 (A AND B) | Reduced demand on potable water. | Less than significant | None required | Less than significant |
| 4.12-8 (A AND B) | Increased use of reclaimed water. | Less than significant | None required | Less than significant |
| 4.12-9 (A AND B) | Increased demand on wastewater collection system. | Less than significant | None required | Less than significant |

TABLE 2-1

SUMMARY OF IMPACTS AND MITIGATION

| Impact Number | Impact | Significance | Mitigation Measure | Residual Significance |
|----------------------|---|-----------------------|---|-----------------------|
| 4.12-10 (A AND B) | Increased demand on wastewater treatment system. | Less than significant | None required | Less than significant |
| 4.12-11 (A AND B) | Increased demand for police protection services. | Significant | Mitigation Measure 4.12-2 (Increase number of police officers in beat area) | Less than significant |
| 4.12-12 (A AND B) | Failure to meet RFD response standards. | Significant | Mitigation Measure 4.12-3 (Construct new fire station.) | Less than significant |
| 4.12-13 (A AND B) | Increased solid waste generation. | Less than significant | None required | Less than significant |
| 4.12-14 (A AND B) | Increased demand for electrical supply. | Less than significant | None required | Less than significant |
| 4.12-15 (A AND B) | Increased demand for natural gas. | Less than significant | None required | Less than significant |
| 4.12-16 (A AND B) | Increased demand for school services in the Roseville Joint Union High School District. | Less than significant | None required | Less than significant |
| 4.12-17 (A AND B) | Increased demand for elementary school services. | Less than significant | None required | Less than significant |
| 4.12-18 (A AND B) | Increased demand for library services. | Significant | 4.12-4 (Contribute to library funding) | Less than significant |
| 4.12-19 (A AND B) | Increased demand for park facilities. | Less than significant | None required | Less than significant |
| 4.12-20 (A AND B) | Increased demand for cable television and telephone services. | Less than significant | None required | Less than significant |

NOTE:

A = Phase I only

B = Full Project

TABLE 2-2

COMPARISON OF ALTERNATIVES TO PROPOSED PROJECT

| Resource | Proposed Project | Alternative 1 No Project/No Development | Alternative 2 No Project/Existing Zoning ² | Alternative 3 Existing Zoning/Urban Reserve Development ² | Alternative 4 Lower-Density ³ | Alternative 5 Offsite ³ |
|---------------------------------------|------------------|--|--|---|---|---------------------------------------|
| Land Use | LS | LS- | LS- | LS- | LS | LS |
| Population, Employment and Housing | LS | LS- | SU+ | SU+ | LS+ | LS |
| Soils, Geology, and Seismicity | LS/MM | LS- | LS/MM- | LS/MM- | LS/MM- | LS/MM+ |
| Hydrology and Water Quality | LS/MM | LS- | LS- | LS/MM- | LS/MM | LS/MM |
| Biological Resources | SU | LS- | SU- | SU- | SU | SU+ |
| Cultural Resources | LS/MM | LS- | LS/MM- | LS/MM- | LS/MM | LS/MM |
| Aesthetics and Visual Resources | SU | LS- | SU- | SU- | SU | SU+ |
| Hazardous Materials and Public Safety | LS/MM | LS- | LS/MM+ | LS/MM+ | LS/MM- | LS/MM- |
| Transportation and Circulation | LS/MM | LS- | LS/MM- | LS/MM- | LS/MM- | SU+ |
| Air Quality | SU | LS- | SU- | SU- | SU- | SU |
| Noise | SU | LS- | SU- | SU- | SU | SU |
| Public Services and Utilities | LS/MM | LS- | LS/MM- | LS/MM- | LS/MM- | LS/MM |

NOTES:

- = Alternative impacts less severe than the Proposed Project.
- + = Alternative impacts more severe than the Proposed Project.
- LS = All impacts would be less than significant, no mitigation required.
- LS/MM = All impacts would be less than significant after mitigation.
- SU = One or more impacts would be significant and unavoidable, even after mitigation.
- S = Proposed Project and the Alternative impacts identical or very similar.
- ¹ = Alternative 6 is not included, because it affects transportation only.
- ² = Assumes development in Neighborhoods A and B, so compare to Phase I only.
- ³ = Assumes development in entire Plan Area, so compare to Full Project.

SOURCE: EIP Associates, 1997.

3. PROJECT DESCRIPTION

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The Proposed Project is located in the City of Roseville in Placer County, California along the northern and western boundaries of the City of Roseville (see Figure 3-1, Regional Location). The NRSP area (Plan Area) consists of a total of approximately 1,390 acres. The first phase (Phase I), consisting of 736 contiguous acres of land in Neighborhoods A and B, is located immediately west of Foothills Boulevard, north of Blue Oaks Boulevard to the city limits and south of Blue Oaks Boulevard to the Woodcreek Golf Club. The second phase (Phase II), which is designated Urban Reserve, consists of two discontinuous parcels - Neighborhood "C" and Neighborhood "D." Neighborhood C is 161 acres immediately west of the Phase I site. Neighborhood D is a 492-acre site bounded by the Del Webb Specific Plan to the north, the Northwest Roseville Specific Plan to the east, Fiddymont Road to the west and Baseline Road to the south.

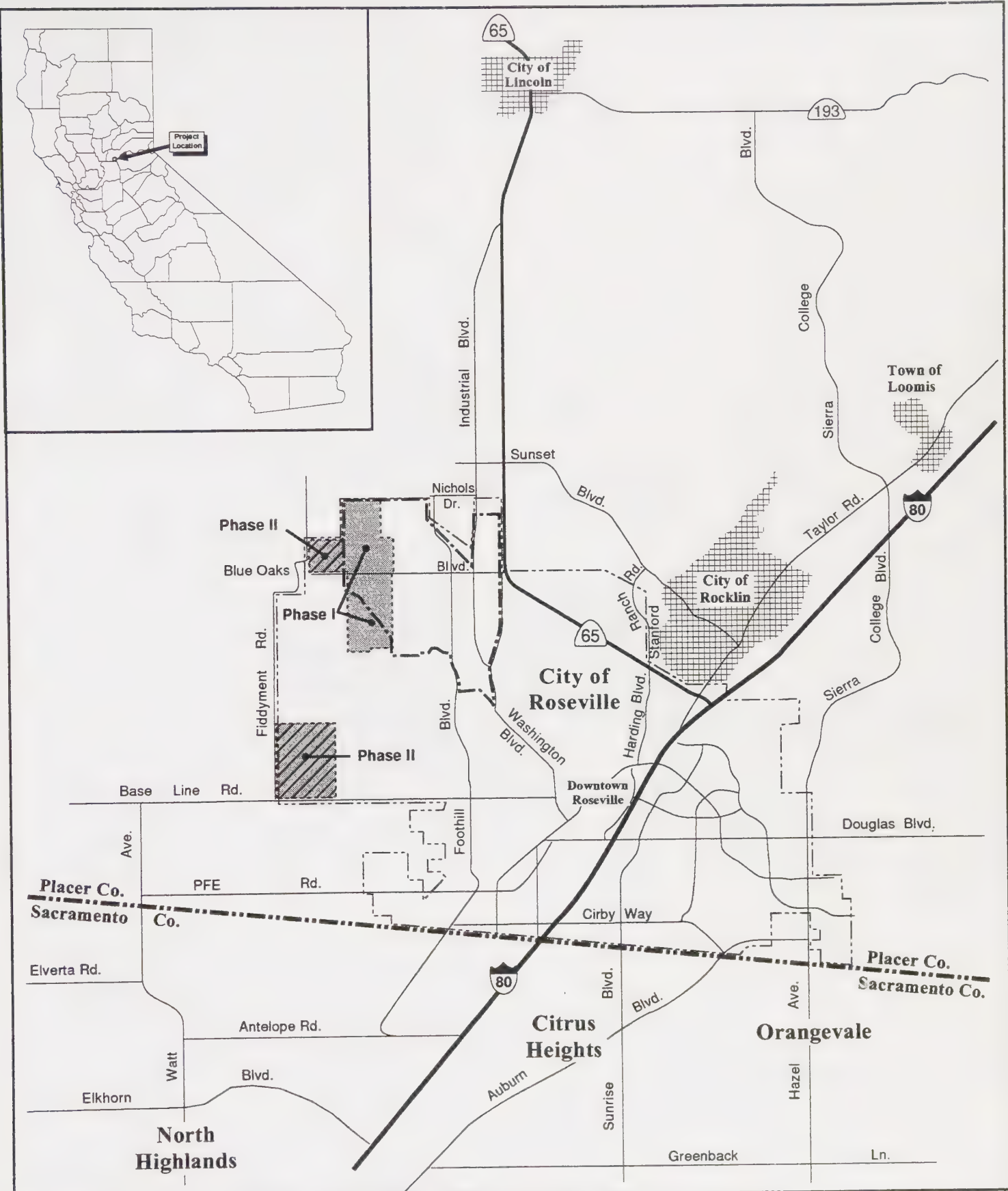
The Proposed Project is generally situated six miles west of Interstate 80 (I-80). State Route 65 (SR 65) provides access from the northwest and intersects I-80 in Roseville. The Proposed Project is approximately one mile west of the Blue Oaks Boulevard interchange on SR 65. Blue Oaks Boulevard and Pleasant Grove Boulevard will provide direct access to SR 65.

3.2 STUDY AREA CHARACTERISTICS

The Plan Area lies in the north and western portions of the City of Roseville, adjacent to the Del Webb Specific Plan Area (see Figure 3-2, Surrounding Land Uses). All of the land in the Plan Area is currently within the incorporated limits of the City. A portion of the Plan Area (about 500 acres) is currently part of the North Roseville Industrial Area and includes the 312-acre Diamond Creek property, the 50-acre Eskaton Village property, and the 140-acre Walaire 140 property, all of which are designated Light Industrial.

The land formation within the Plan Area is generally composed of rolling topography with mild slopes, ranging from less than 10 percent up to 20 percent or more in the vicinity of Pleasant Grove Creek or the South Branch of Pleasant Grove Creek. The elevation of the Plan Area ranges from approximately 80 feet above mean sea level (msl) in the northwestern portion of the study area to approximately 155 feet above msl in the eastern portion of the study area.

The majority of the Plan Area is undeveloped annual grasslands. Cattle and sheep have grazed in portions of the Plan Area for several decades. The predominant land use of the Plan Area is agricultural grazing. Extensive areas of oak woodlands occur along portions of the main drainage courses in the Plan Area: Pleasant Grove Creek and the South Branch of Pleasant Grove Creek.



SOURCE: EIP
Associates,
March 1997.



0 2,000 4,000
Scale in Feet

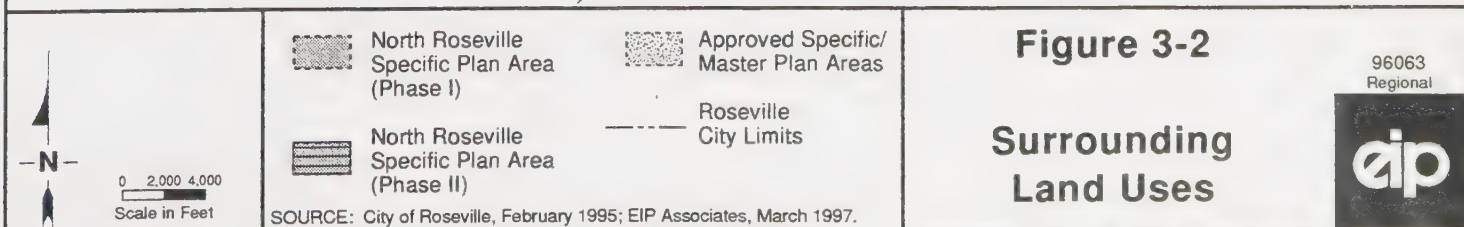
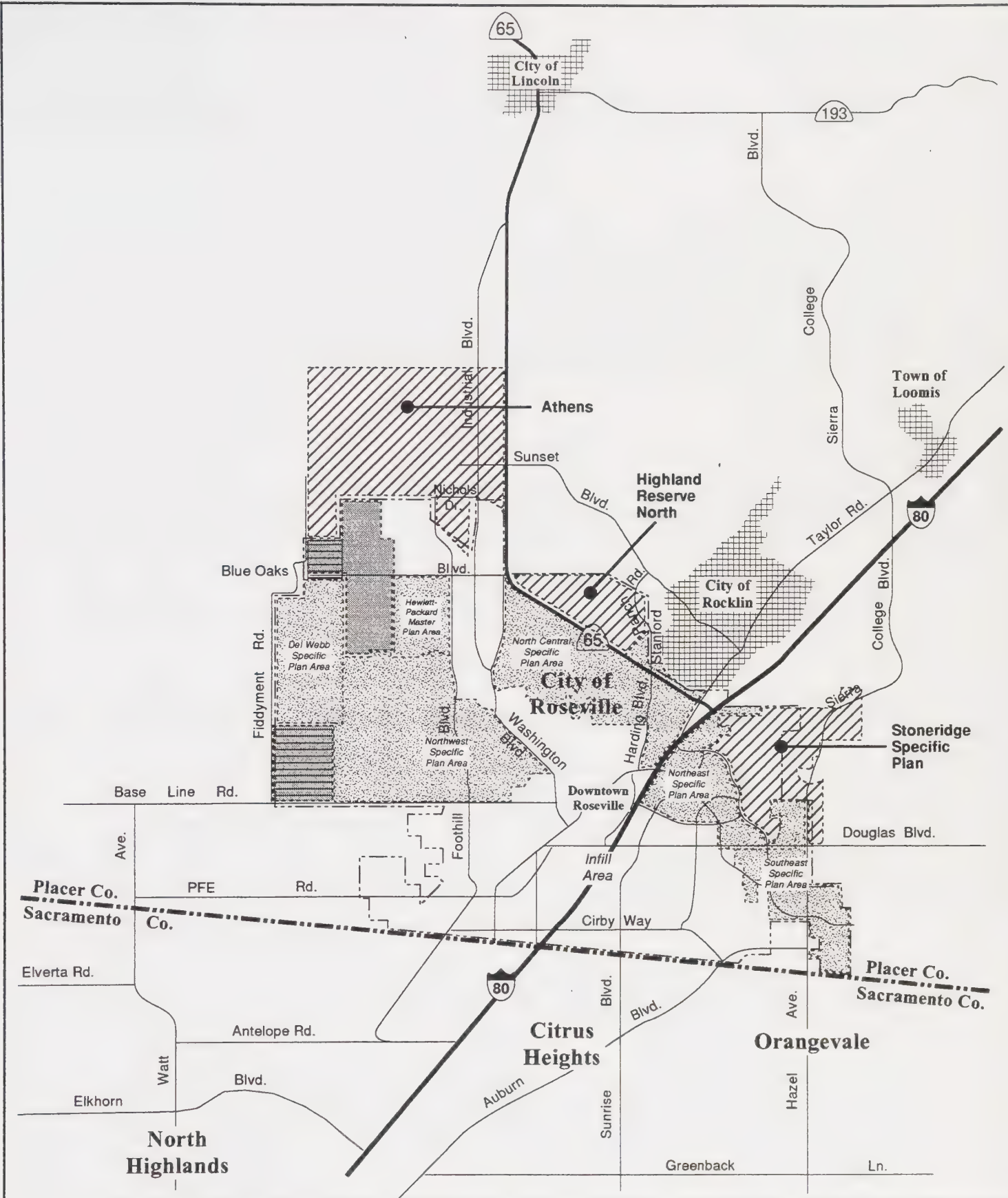
- Specific Plan Area (Phase I)
- Specific Plan Urban Reserve Areas (Phase II)
- Roseville City Limits
- North Roseville Industrial Area

Figure 3-1

Regional Location Map

96063
Regional





Complete descriptions of the characteristics of the Plan Area can be found in Chapter 4 of this DEIR for the particular resource or subject area of interest.

3.3 PROJECT BACKGROUND AND HISTORY

The NRSP is intended to provide comprehensive planning for over 1,000 acres of remaining land in the northern and western portion of the incorporated City of Roseville. The Specific Plan provides for development in two phases. Phase I encompasses approximately 736 acres that are currently zoned Light Industrial and Urban Reserve. Phase II provides plans for approximately 654 acres that are currently designated Urban Reserve. The Specific Plan addresses all aspects of the Plan Area, including land use, circulation, infrastructure, public services, implementation, and design characteristics.

3.4 PROJECT OBJECTIVES

The Proposed Project is intended to provide for the orderly and systematic development of a mix of residential neighborhoods, schools, parks, community commercial and business/professional uses in a manner consistent with the policies of the City and the characteristics and natural features of the land.

Specific objectives identified by the Applicant are:

- (1) Provide public services to meet the needs of development within the plan.
- (2) Provide a distinct identity, sense of organization and order for the Plan Area.
- (3) Provide a housing supply near the employment centers in the northwest area of the city to enhance the potential for jobs/housing balance and to minimize trip length for employees to and from the employment center.
- (4) Provide a range of housing types and densities that include dwellings affordable to households in a variety of income categories, and provide special residential and care facilities for seniors.
- (5) Provide space for retail, commercial, and professional land uses to serve the Plan Area residents and the general public such that residents reduce the need to travel outside of the Plan Area for many routine daily needs.
- (6) Enhance neighborhoods by integrating natural areas through visual and pedestrian links and protect the woodland and creek side environment along Pleasant Grove Creek and its tributaries in open space and parks. Provide direct access to open space through neighborhoods.
- (7) Provide a pedestrian and bicycle path system and access to public transit to encourage residents to minimize auto use for shopping, services and leisure activities.

- (8) Complete the land use and infrastructure planning for the northwestern portion of the City.

3.5 REQUIRED PERMITS AND APPROVALS

As part of the implementation of the Proposed Project, several permits and approvals would be necessary prior to construction of Phase I. These are listed below, and the relevant agencies involved in the review process are identified. In addition to these requirements, regulatory guidance applicable to individual environmental resources is described in the Regulatory Setting sections of Chapter 4.

- Section 404 Permit (U.S. Army Corps of Engineers and Environmental Protection Agency)

The U.S. Army Corps of Engineers (Corps) regulates the placement of fill or dredged materials that affect waters of the United States, which include stream courses and jurisdictional wetlands. The Corps regulates these activities under the authority of Section 404 of the Clean Water Act, and the Environmental Protection Agency (EPA) has commenting and vetoing authority on Corps decisions. The Corps would regulate development in the Plan Area that affects jurisdictional wetlands.

- Water Quality Certification (State Water Resources Control Board)

Construction of the Proposed Project has the potential to directly or indirectly affect "waters and wetlands of the United States". Water or wetlands disturbance could result in a discharge to Pleasant Grove Creek or the South Branch of Pleasant Grove Creek. A water quality certification would be required by the State Water Resources Control Board.

- Streambed Alteration Agreement (California Department of Fish and Game)

CDFG has jurisdiction over construction activities affecting streambeds and banks and work within the 100-year floodplain. This is an agreement reached between an applicant and CDFG regarding methods to be utilized to avoid or minimize aquatic or wetland habitat losses. Construction of the Proposed Project will require a Section 1603 Streambed Alteration Agreement from California Department of Fish and Game (CDFG) to evaluate the potential for impacts to aquatic habitat in stream channels.

- Storm Water Discharge Permit (State Water Resources Control Board)

Construction of the Proposed Project will involve clearing, grading, and excavation activities that would result in the disturbance of five acres or more of land. As such, the Proposed Project would require a State Water Resources Control Board (SWRCB) permit for storm water discharge. The permit process would include identification of Best Management Practices (BMP's) to control pollutants in storm water discharges both during construction and after construction is completed. BMP's for the Proposed Project

would include perimeter controls, diversion channels, sedimentation collection systems, soil stabilization, storm water treatment ponds and wetlands, wet and dry detention ponds, and grassed waterways.

■ Consultation with U.S. Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), the Bald and Golden Eagle Protection Act (16 USC Section 668), and the Federal Endangered Species Act (FESA, 16 USC § 153 *et seq.* Consultation with the USFWS is required for projects that would result in adverse affects on any federally listed threatened or endangered species. This consultation can be pursuant to either Section 7 or Section 10 of the Endangered Species Act, depending on the magnitude of involvement by the federal government. The objective of consultation under the Endangered Species Act is to determine whether the project would jeopardize a protect species, and what mitigation measures would be required to avoid jeopardizing the species.

■ General Plan Amendment (City of Roseville)

The Proposed Project will require a General Plan Amendment to change land use from light industrial and urban reserve to low, medium, and high- density residential, community commercial, business-professional, parks and recreation, open space, and public/quasi-public uses. A GPA is also needed to amend the dwelling unit figure of 39,200 units.

■ Development Agreement

A development agreement will be prepared for each property in the NRSP, setting forth needed infrastructure improvements, park dedication requirements, timing and methods for financing improvements and other specific performance obligations of the property owner and the City of Roseville.

■ Tree Permit (City of Roseville)

Construction of the Proposed Project will involve removal of native oak trees which are afforded protection under the City's Zoning Ordinance, Tree Preservation Chapter. All regulated activity within the protected zone of a protected tree requires a tree permit. The approving authority for tree permits is the Planning Commission.

■ Specific Plan adoption, and Specific Plan Design Guidelines.

■ Rezone from light industrial and urban reserve to zone districts consistent with the Specific Plan.

■ Large Lot Tentative Map to create specific plan parcels.

- Small lot tentative subdivision map.

Phase II would require the above approvals, and:

- Annexation of Fiddymment Road adjacent to the project site. This EIR may be used by LAFCO in its consideration of the annexation proposal (Phase II).
- Abandonment of a portion of Baseline Road due to realignment (Phase II).

Pursuant to the Public Resource Code and the CEQA Guidelines, subsequent approvals may not require additional environmental analysis.

Public Resources Code § 21083.3 includes the provision that if an EIR has already been certified for a particular zoning or planning action, subsequent approvals (e.g., subdivision map) consistent with the approved zoning or community plan would be limited to "effects upon the environment which are peculiar to the parcel or to the project and which were not addressed as significant effects in the prior EIR." Section 21158.5 allows tiering from the prior EIR for multi-family residential development of fewer than 100 units or commercial or retail mixed-use development of not more than 100,000 square feet, if certain conditions are met.

Section 15181 of the CEQA Guidelines allows the Lead Agency to approve a project that involves residential development or neighborhood commercial facilities in an urbanized area using an EIR prepared for a Specific Plan.

Under CEQA Guidelines § 15182, residential development proposals that are consistent with the Specific Plan and this EIR will not require subsequent environmental analysis. For discretionary approval of other projects under the Specific Plan, the City will determine at the time of the proposal whether any environmental analysis (beyond that contained in this EIR) is necessary. Any future environmental analysis is anticipated to be "tiered" from this EIR, pursuant to CEQA Guidelines § 15152 and other cited sections in order to streamline the environmental analysis.

Public Participation in the Project Approval Process

The public will have several opportunities to review and comment on the Proposed Project. This Draft EIR will be available for public review and comment for 45 days. The Planning Commission and City Council will each hold a public hearing on the EIR. Community members and other interested parties may provide written comments at any time during the review period, or verbal comments at the hearings.

3.6 PROPOSED PROJECT

The Applicant has prepared and submitted to the City a specific plan for the Proposed Project, called the NRSP. The NRSP brings together six properties under four separate ownerships (see Figure 3-3, Property Ownership Map). The ownerships and their related parcels include Diamond Creek Partners, Inc. (Diamond Creek -- 312.1 acres), Eskaton (Eskaton Village -- 50.8 acres), Mourier Land Investment Corporation (Mourier 140 -- 140.5 acres, Walaire 160 -- 161 acres),

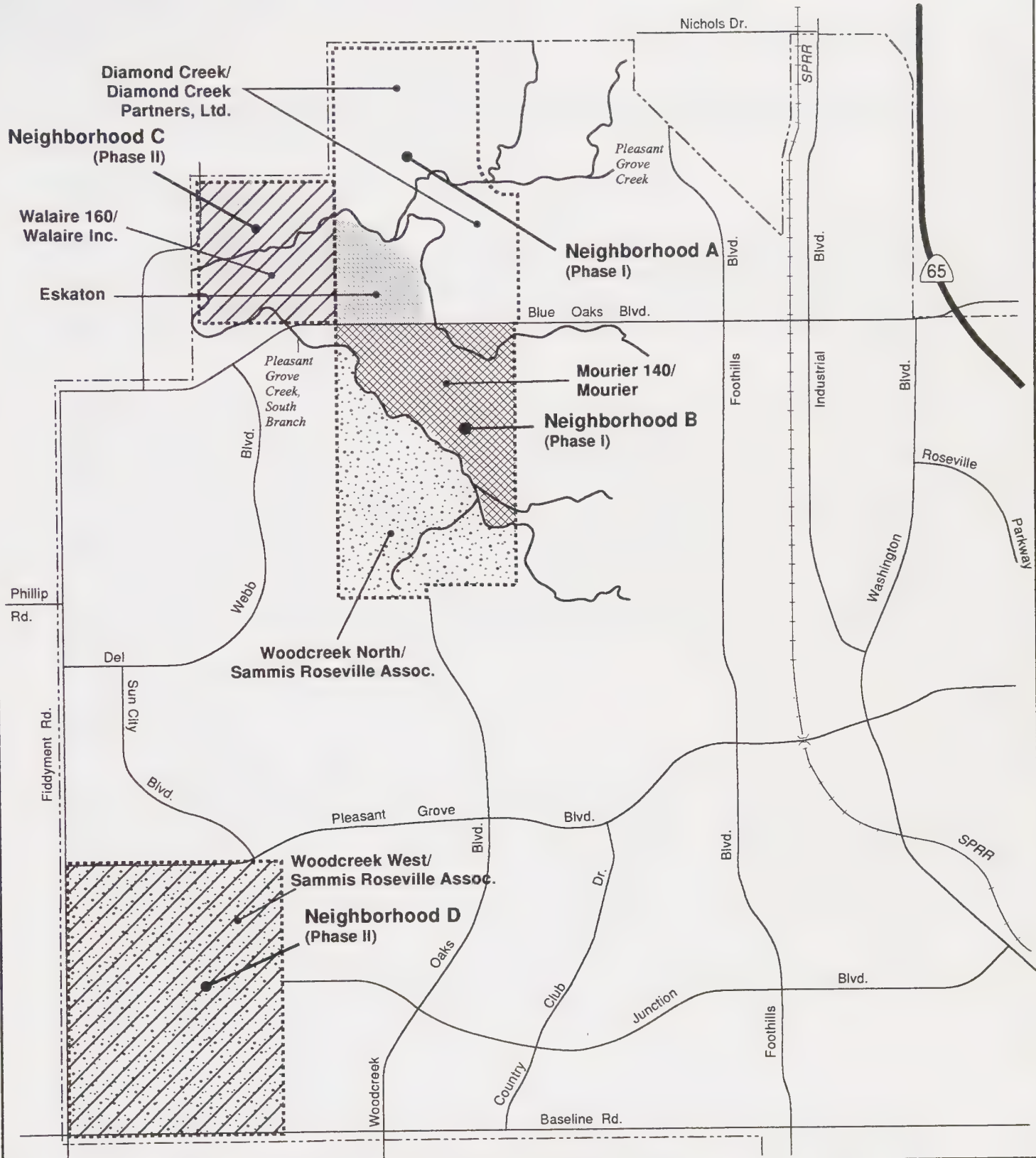



Figure 3-3
Property
Ownership Map

- Specific Plan Area
-  Urban Reserve Areas
- - - - - Roseville City Limits
- Existing and Approved Roads

SOURCE: Wade Associates, *North Roseville Specific Plan Draft*, 1996;
EIP Associates, March 1997.

0 1/4 1/2
Scale in Miles



96063
Base

eip

Sammis Roseville Associates (Woodcreek North -- 232.9 acres and Woodcreek West -- 492.6 acres).

3.6.1 Land Use Element

Phase I of the Proposed Project encompasses a total of 736.3 acres and Phase II contains 653.6 acres for a Full Project total of 1,389.9 acres (Phases I and II combined). The dominant land uses proposed for the Plan Area are single family detached residential, open space and recreation. The proposed land uses for Phase I and Phase II are summarized in Table 3-1 and graphically illustrated on Figure 3-4, Proposed Land Use Plan.

To permit greater flexibility in determining dwelling unit type and parcel configuration, the NRSP designates specific overlay districts. The Special Area (SA) overlay district allows for the modification of the general district regulations (including both permitted use types and development standards) by reference to regulations adopted in the Zoning Ordinance. When the SA combining zone is used it is to identify specific uses permitted within that particular zone and does not allow any deviation from the development standards developed for that respective zone district. The RS/SA and R1/SA combining zones are used within the Plan Area to allow flexibility in selecting unit types and parcel configurations to suit particular site conditions and housing needs. In addition, the development standards within either the R1 or RS zones may be modified from the general district standards when the general zone is combined with a Development Standards (DS) overlay zone.

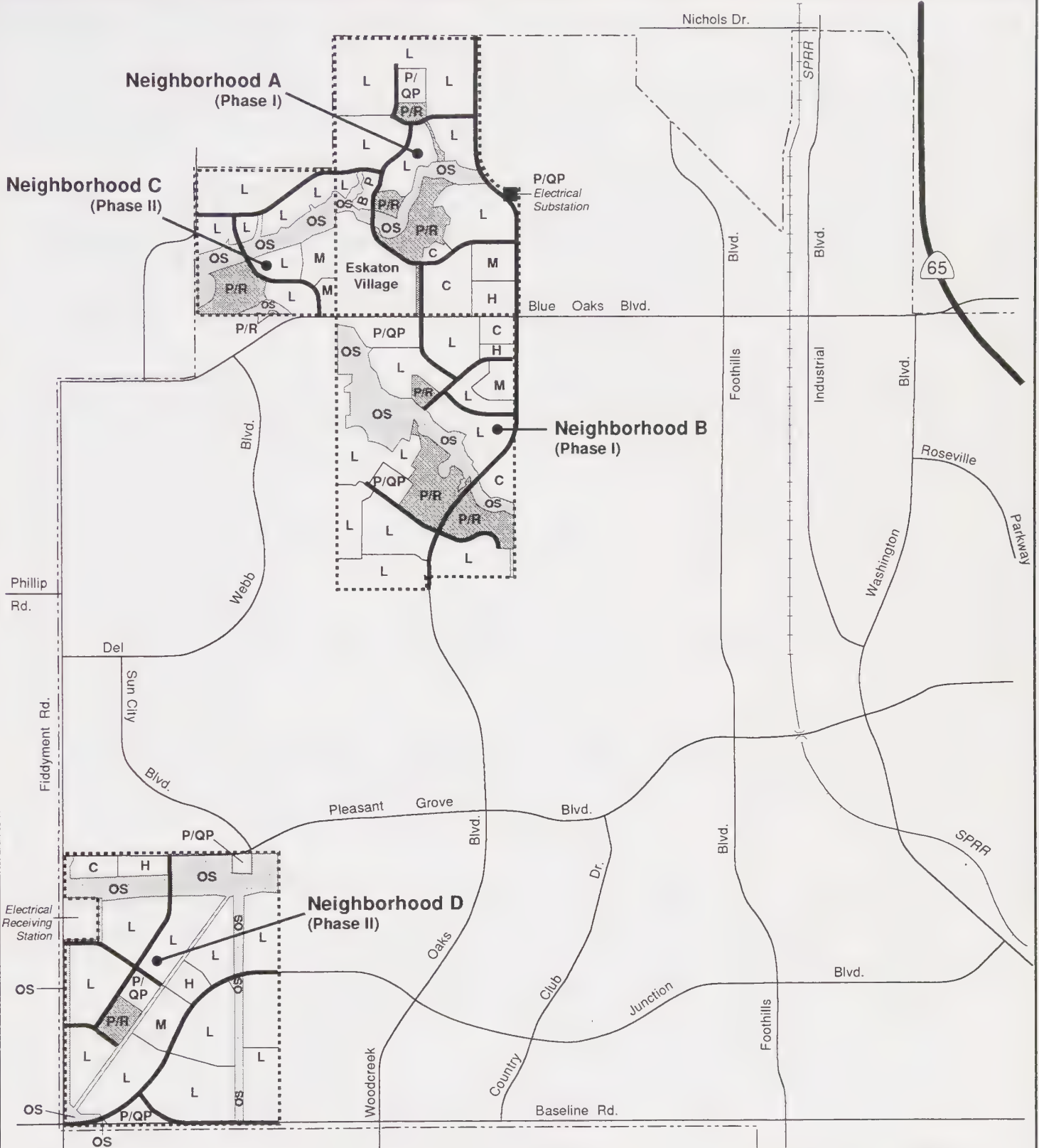
Phase I Land Uses

Phase I of the Plan Area is defined as the area west of Foothills Boulevard, north of Blue Oaks Boulevard to the city limits and south of Blue Oaks Boulevard to the Woodcreek Golf Club. The land uses for Phase I include 2,523 low-, medium-, and high-density residential units including 400 independent living residential units within a fifty-acre (approx.) retirement community offering a range of supportive and health services. For the analysis in this EIR, it is assumed that the Proposed Project's residential units would be in addition to the 39,200 units currently allocated for development by the City. The additive approach used in this EIR provides a conservative analysis of impacts. In addition, Phase I would also include commercial, business-professional, parks, open space uses and three school sites. The specific land uses for Phase I are summarized below.

Residential Neighborhoods

Neighborhood "A" is located in the northern portion of the Plan Area, north of Blue Oaks Boulevard (see Figure 3-4, Proposed Land Use Plan). Neighborhood A would contain primarily low density single-family residential uses, a limited number of medium and high density multi-family units, and the approximately fifty-acre retirement community (Eskaton Village) that offers a range of supportive and health services, as well as a limited amount of commercial, and business-professional uses to support the neighborhood residents. An elementary school site and park is located in the northern quadrant of the site. Neighborhood A contains an east-west open

| TABLE 3-1 | | | | |
|---|--------|--------------|--------------|----------------|
| NORTH ROSEVILLE SPECIFIC PLAN | | | | |
| LAND USE ALLOCATION | | | | |
| Land Use | | Phase I | Phase II | Total |
| Residential Uses | | | | |
| R-1 | Acres: | 366.1 | 392.4 | 758.5 |
| (LDR) | Units: | 1,689 | 1,835 | 3,524 |
| R-1 | Acres: | 28.3 | 36.3 | 64.6 |
| (MDR) | Units: | 159 | 294 | 453 |
| R-1 | Acres: | 14.8 | 22.5 | 37.3 |
| (HDR) | Units: | 275 | 446 | 721 |
| Eskaton Village Units | Acres: | 50.8 | 0.0 | 50.8 |
| (Independent Living) ¹ | Units: | 400 | 0 | 400 |
| Total Residential | Acres: | 460.0 | 451.2 | 911.2 |
| | Units: | 2,523 | 2,575 | 5,098 |
| Community Commercial (CC) | | 37.7 | 6.9 | 44.6 |
| Business Professional (BP) | | 4.4 | 0.0 | 4.4 |
| 7-8 School (P/QP) | | 22.3 | 0.0 | 22.3 |
| K-6 School (P/QP) | | 16.0 | 10.0 | 26.0 |
| School Administration (P/QP) | | 0.0 | 3.9 | 3.9 |
| Park (P/R) | | 79.2 | 29.6 | 108.8 |
| Open Space (OS) | | 81.5 | 111.7 | 193.2 |
| Fire Station (P/QP) | | 0.0 | 1.5 | 1.5 |
| Electric Substation (P/QP) | | 1.0 | 0.0 | 1.0 |
| Other P/QP uses | | 2.3 | 0.0 | 2.3 |
| Street Right-of-Ways | | 31.9 | 38.8 | 70.7 |
| Total Plan Acreage | | 736.3 | 653.6 | 1,389.9 |
| Total Units | | 2,523 | 2,575 | 5,098 |
| ¹ Eskaton also includes licensed care and associated services. | | | | |
| SOURCE: Wade and Associates, 1996. | | | | |



- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Open Space
- Parks
- Existing and Approved Roads
- Proposed Roads

L=Low Density Residential (LDR)
 M=Medium Density Residential (MDR)
 H=High Density Residential (HDR)
 C=Commercial (COMM)
 BP=Business-Professional
 P/R=Park-Recreation
 P/QP=Public/Quasi Public
 OS=Open Space

SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996; EIP Associates, May 1997.

Figure 3-4

**Proposed
Land Use Plan**

0 1/4 1/2
Scale In Miles



96063
Base

eip

space corridor that parallels Pleasant Grove Creek, which includes one park and pedestrian promenades.

Eskaton Village, Roseville, is planned to be a campus-like setting that includes several residential and institutional services designed for seniors. Proposed residential units include clustered or attached residences, apartments and assisted living apartments, a nursing facility, and an adult day care center. A central community center will house major common areas and administrative offices. The buildings will be connected by interior roads and landscaped walking paths. The entire facility will be designed to accommodate all mobility levels.

Included within Neighborhood A are parcels DC-9a and DC-9b which are zoned for residential uses, but include a "Special Area" (SA) zoning overlay to permit an equestrian facility. Up to seven single-family dwelling units may be constructed on parcel DC-9a. However, because an equestrian use is intended for this parcel, an SA overlay zone will permit the following uses:

- private residence,
- barn with air conditioned and heated areas,
- stable,
- paddocks,
- lighted arenas,
- other facilities (i.e., outbuildings associated with the operation of a private equestrian facility), and
- gardens, planted fields, greenhouse.

Parcel DC-9b is located within the floodplain of Pleasant Grove Creek, and is limited to an equestrian arena which may include fencing which would not impact the flow of water in the floodplain. In addition, the arena would not include any materials (i.e., sand) which would affect water quality in Pleasant Grove Creek in the event of a flood.

Neighborhood "B" is located immediately south of Blue Oaks Boulevard, adjacent to the Del Webb Specific Plan area to the west and the Hewlett-Packard property to the east (see Figure 3-5). The predominant developed land uses in Neighborhood B would be low density single family residences, however the neighborhood also includes a small area of high density residential uses. The southern boundary of Neighborhood B is formed by the presence of the South Branch of Pleasant Grove Creek, which flows in a northwest-southeast direction. Community commercial uses would support the neighborhood and would be located in the northeast corner at the intersection of Blue Oaks Boulevard and Woodcreek Oaks Boulevard. Neighborhood B would also include a junior high and elementary school, a park and a pedestrian link which crosses the South Branch of Pleasant Grove Creek.

Residential Use

Phase I of the Plan would designate the location of 2,523 dwelling units on 460 acres. The average density of all land designated for residential use would be 4.6 dwelling units per acre (du/ac). The ultimate residential population would be approximately 5,992 residents, based on an

assumed household population of 2.54 persons per household (except in Eskaton Village, Roseville where 1.5 persons per household was assumed for the 400 Independent Units).¹

Of the total number of dwelling units in Phase I, ten percent are planned to meet pricing criteria for low or middle income households, as set forth in the General Plan. The affordable dwelling units are to be designated in each residential parcel in order to achieve a distribution throughout this portion of the Plan Area. One-quarter (25%) of the affordable units would be ownership residences affordable to middle income households, and three-quarters (75%) of the affordable units would be ownership and multi-family rental units affordable to low income households.

For the EIR analysis, it is assumed that the residential units in the project would be in addition to the 39,200 units currently allocated for development by the City. However, not all of the units are likely to be built, thus making some units within the City's population cap capable of being transferred to the Proposed Project. If this is the case, the total (net) number of new units associated with the project would be lower and the severity of impacts would be somewhat less than described in this EIR. In order to provide a conservative analysis, this EIR assumes that all project units are in addition to the 39,200.

Low Density Residential

A total of 375.5 acres would be designated low density residential in Phase I; as many as 1,689 units could be constructed if these acres are fully developed. Phase II proposes 1,835 units on 361.2 acres. The type of dwelling units anticipated in this density range would include small lots as well as conventional detached residences, with an overall density of up to 6.9 units per gross acre (exclusive of open space and adjacent collector streets). The density range would allow flexibility in selecting dwelling unit types and parcel configurations to suit particular site conditions and housing needs.

Medium Density Residential

In Phase I, a total of 18.9 acres and 159 units would be designated for medium density residential uses. In Phase II a total of 294 units on 36.3 acres is proposed. The medium density residential category would include dwelling units in configurations resulting in densities of from 7.0 to 12.9 dwelling units per gross acre. Dwelling units in this density range would be typically attached unit types, although small lot configurations would allow detached units at these densities. The medium density category would allow "cottage type" or "patio" housing, low-density condominium housing, and co-housing style residential development.

High Density Residential

Two sites within Phase I, totaling 14.8 acres, would be designated for high density residential; a total of 275 units could be constructed if the sites are fully developed with a density of 13.0 units per gross acre or higher. In Phase II, 446 units on 22.5 acres is proposed. Typical housing types developed under the high density designation would include attached housing such as townhouses, apartments, and condominiums, consistent with the Attached Housing District of the City Zoning Ordinance.

Eskaton Village, Roseville

A 50.8-acre site on Blue Oaks Boulevard is designated for Eskaton Village, Roseville. Eskaton Village, Roseville is intended to be a campus-style senior housing development, designed for those transitioning to, or in need of, some level of assisted living or extended care. Eskaton Village, Roseville would provide approximately 400 independent living cottages and apartments, and continuing care would be provided in a skilled nursing facility.

The CC/SA zoning for Eskaton Village, Roseville would permit congregate housing in attached units (residential), assisted living, skilled nursing facility, adult day care center-adult day health center, home health agency, administrative offices and/or other comparable services. The 400 units of congregate housing have been analyzed as dwelling units for the purposes of this EIR. The remaining uses are considered commercial uses, because they function similar to commercial uses.

The Eskaton Village, Roseville site would be located approximately one-quarter mile from the Del Webb Specific Plan area, currently being developed as an active adult community. The Eskaton Village and Del Webb communities would be intended to be complementary uses serving senior citizens at different stages in their lives.

Community Commercial Land Use

The Community Commercial land use would provide a mix of shops and services to meet the daily shopping needs of the residents and employees in the Plan Area. Typical uses permitted within the Commercial land use would include, but are not limited to grocery stores, retail stores, banks, restaurants, bakeries, and professional offices.

In Neighborhood A there are two Community Commercial sites located north of Blue Oaks Boulevard for a total of 23 acres. In Neighborhood B there is a total of 14.7 acres designated for Community Commercial uses.

Business-Professional Land Use

The Business-Professional land use is intended to provide for a wide variety of office uses and other uses that are related to and supportive of office use. In the Business-Professional land use small professional offices could be mixed with specialty retail, restaurants, or other commercial uses. Typical uses permitted within the Business-Professional land use would include medical, dental and general offices, professional services, restaurants, financial institutions, bakeries and groceries, hairdresser and related services.

Two Business-Professional sites would be located in Neighborhood A north of Pleasant Grove Creek, for a total of 4.4 acres.

Open Space and Park Land Uses

Approximately 81.5 acres within Phase I of the Plan Area would be in open space in a variety of forms including, preserves, creek corridors, and utility easements (see Figure 3-5, Parks and Open Space System). The open space areas within the Plan Area is intended to serve a variety of functions, including the reservation and protection of public and private lands that are significant due to wildlife habitat, natural features or flood hazard.

Approximately 79.2 acres of passive and active parks, including pedestrian promenades would be provided in Phase I (see Figure 3-5).

Public/Quasi Public

In Phase I 41.6 acres are planned for public/quasi-public uses. This would include such uses as schools, fire stations, utility easements and an electric substation. In Phase II, approximately 15.4 acres are planned for these uses.

Full Project Land Uses

The following section describes Phase II as well as the Full Project (Phases I and II) development scenario. The Full Project scenario comprises the entire Plan Area (1,389.9 acres). Acreages are presented in Table 3-1. It should be noted that Phase I could be developed independent of the Full Project.

Residential Uses

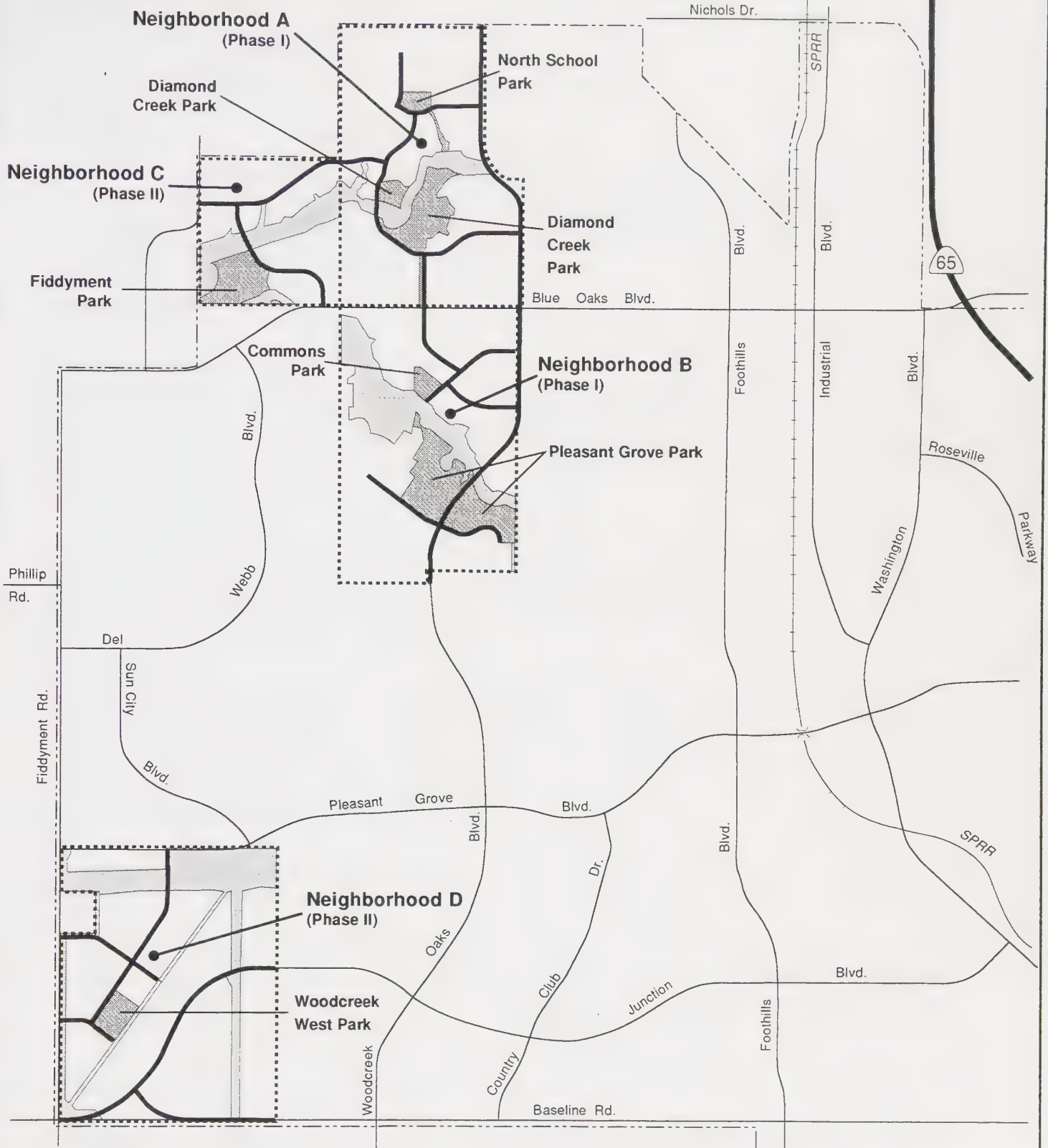
A total of 2,575 dwelling units in a variety of types and densities are proposed in Neighborhood C and D in Phase II, in addition to the 2,523 units in Phase I for a Full Project total of 5,098 units. The majority are low density residential with 294 units designated for medium density and 446 units designated for high density residences for a Full Project total of 453 medium density units and 721 high density units. The Full Project residential population of the Plan Area is estimated to be approximately 12,533 residents, 6,541 residents are proposed for Phase II, based on an assumed household population of 2.54 persons per household.

Commercial Land Uses

One 6.9-acre site in Neighborhood D is designated for commercial uses for Phase II in addition to the 37.7 acres in Phase I for a Full Project total of 44.6 acres of commercial uses. The site is located south of Pleasant Grove Blvd. and east of Fiddymment Road.

Open Space Land Uses

Within Phase II, approximately 141.3 acres would be designated as parks or open space, which comes in a variety of forms and includes parks, pedestrian promenades, park preserves, creek corridors, and landscape corridors for a Full Project total of 302 acres devoted to parks and open space (see Figure 3-5).



- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Proposed Roads

- Open Space
- Parks

SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996;
EIP Associates, May 1997.

0 1/4 1/2
Scale In Miles



96063
Base



Figure 3-5
Parks and Recreation
Master Plan

Schools

Three elementary schools and one middle school (grades 7 and 8) are planned for the Full Project for a total of 48.3 acres. In Phase I, one elementary school is planned for Neighborhood A and one elementary and middle school is planned for Neighborhood B. In Phase II, a 10-acre elementary school is planned in Neighborhood D.

3.6.2 Circulation Element

The circulation system in the Plan Area would use the basic road system identified in the City of Roseville General Plan and would provide opportunities for residents to reduce automobile use by reducing the need for some daily trips and providing alternative modes of transportation. The need for vehicle trips is intended to be reduced by the organization of land uses and the strategic placement of facilities so that residents can walk or bicycle for many trips that might otherwise be taken by automobile.

The NRSP circulation system is intended to participate in the completion of the General Plan circulation system by extending and connecting planned roads (see Figure 3-6). By completing the network of existing and planned arterial roads, the Plan anticipates a grid system that would channel traffic in a northeast direction toward SR65 and, ultimately, Interstate 80.

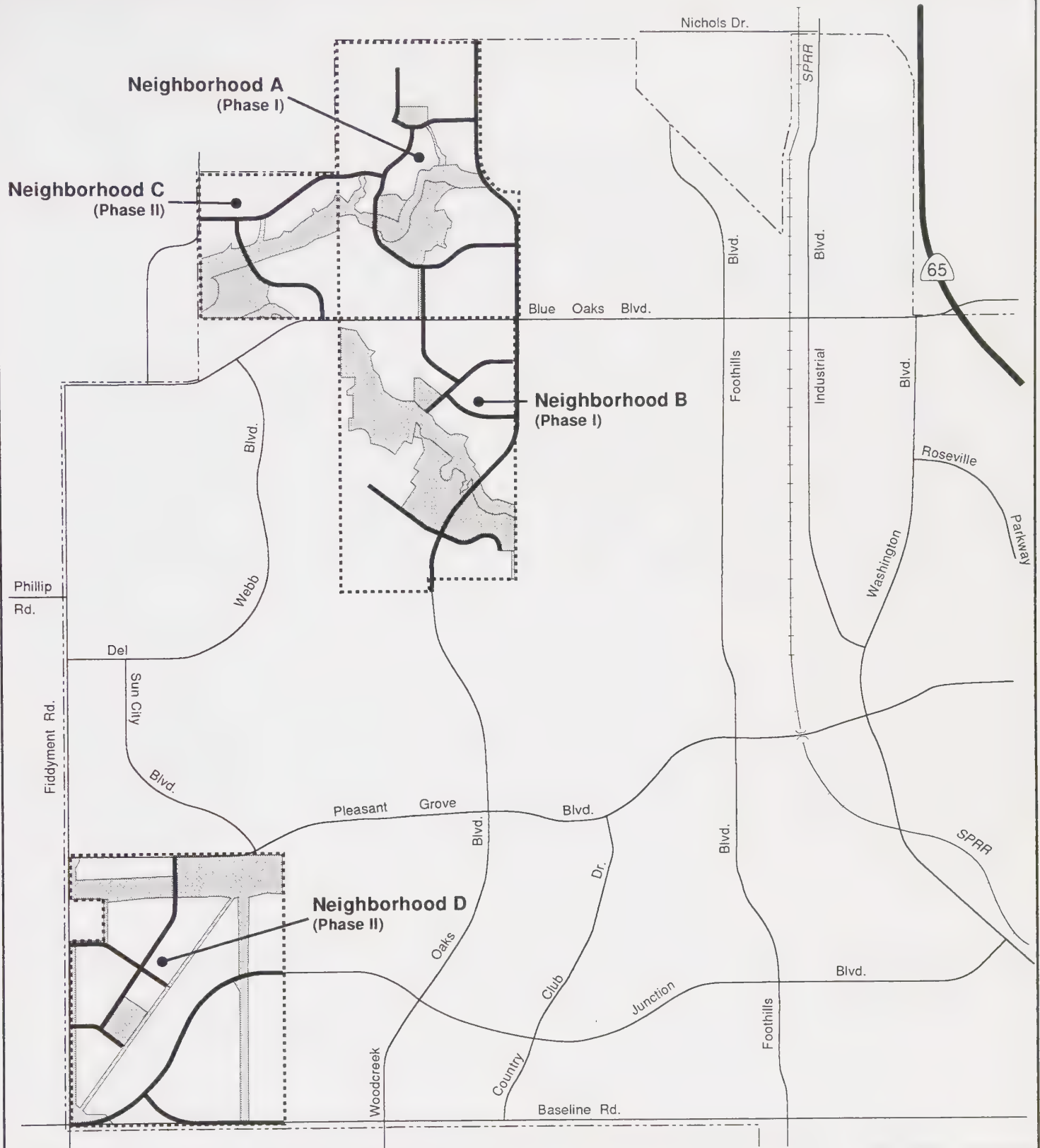
The Specific Plan includes a Primary Bikeway/Pedestrian Pathway system independent of the regular street system, as well as a Secondary Bikeway System (Class II) which would be incorporated into the regular street system to accommodate other modes of transportation. The primary system includes pathways in landscape corridors, pedestrian promenades, trails within parks, park preserves and open space areas. The Plan's Pathway System links to the existing and planned citywide pathway network.

It is proposed that Roseville Transit and Roseville Area Dial-a-Ride (RADAR) be expanded to the Plan Area as demand for these services occurs and funds become available.

Employers within the Plan Area would be required to comply with the City of Roseville's TSM Ordinance, originally adopted in 1983 and revised in January 1991, which requires companies with more than 50 employees to prepare a TSM plan that promotes use of alternative modes of transportation, including public transit and carpool/vanpools.

3.6.3 Resource Management Element

The Resource Management Element of the Proposed Project is intended to ensure that the natural resources of the Plan Area are conserved and that the impacts associated with both Phase I and the Full Project are mitigated to the extent possible.



- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Open Space
- Existing and Approved Roads
- Proposed Roads

SOURCE: Wade Associates, North Roseville Specific Plan Draft, November 10, 1994
EIP Associates, May 1997.

Figure 3-6
Proposed Plan Area
Circulation Master Plan

0 1/4 1/2
Scale In Miles



96063
Base



Wetlands

A variety of types of wetlands occur within the Plan Area. Wetlands within the Plan Area are typically seasonal in nature; that is, they contain or carry water only during the wet season of the year. These wetlands include vernal pools, seasonal wetlands, intermittent drainages and creeks, seasonal emergent marsh, and constructed wetlands. Wetlands within the Plan Area have been delineated using methods described in the U.S. Army Corps of Engineers Wetland Delineation Manual. Some of the wetland delineations prepared on Plan Area properties have been verified by the Corps.

The Proposed Project (both Phase I and Full Project) would avoid some vernal pools and other wetlands; however, Full Project development would result in the need to "fill" a portion of the wetlands and, thus, would require a permit issued by the Corps pursuant to Section 404 of the Clean Water Act. Permits have been secured for the Diamond Creek, Eskaton, Woodcreek North and Woodcreek West properties. A Regional Water Quality Control Board Certification and a 1603 Streambed Alteration Agreement from the Department of Fish and Game has also been received. The Walaire 160 property is pending USCOE verification. An application for a wetland permit has been made for the Mourier 140 property and a permit issued subject to Section 7 consultation for impact to endangered species and water quality certification.

Oak Woodlands

Mature riparian woodland, consisting mostly of blue oaks, lines the main corridors of Pleasant Grove Creek and the South Branch of Pleasant Grove Creek. The Proposed Project land uses are configured to retain a majority (approximately 85%) of the existing oak woodlands by designating the creek corridors as open space. Some tree removal may be necessary to accommodate development, road crossings, pathway crossings, and linear trails. Removal and replacement of native oak trees would be subject to the Tree Preservation Chapter of the Roseville Zoning Ordinance.

Soils and Grading

There are relatively consistent soil conditions across the Plan Area. Soils in the Plan Area are typically well-drained with a very slow permeability and few development constraints. All grading in the Plan Area would be required to comply with the City of Roseville grading and erosion control requirements.

Water Quality

The Proposed Project would incorporate a system to control post-construction stormwater pollution. Natural drainage swales would enhance water quality by incorporating settling basins, rock energy dissipaters, and biological treatment. Grassy swales would be used to convey runoff to either a stabilized channel or into another facility (i.e., detention pond, constructed wetland). Swales and creeks and their tributaries would be integrated with recreation and circulation features in pedestrian promenades, in open space corridors, in powerline easements, and/or in landscape corridors along arterial streets.

Water Conservation

A potable water system would be developed in the Plan Area. Reclaimed water would be used to irrigate public parks to the extent permitted by law. All landscaping within the Plan Area shall comply with the Roseville Water Efficient Landscape requirements.

3.6.4 Public Facilities and Services Element

The Proposed Project would provide a variety of public facilities and services, including schools, parks, police and fire protection, electric utilities, water facilities, sewer system, and storm drainage system. Figures showing proposed water, reclaimed water and wastewater lines, electrical and fire protection facilities, and school sites are located in Section 4.12, Public Facilities and Services.

Water

The water delivery system within the Plan Area would connect directly to the City's existing water system infrastructure on the west side of the City of Roseville (see Figure 4.12-5).

Reclaimed Water

The Proposed Project would allow for the use of reclaimed wastewater for irrigation of public parks, as shown on Figure 4.12-1. Reclaimed water may be conveyed through an existing sewer force main that would be abandoned after construction of a new fire main. If reclaimed water is not available, potable water would be used to irrigate parks.

Wastewater

The Plan Area would be served by the Roseville Regional Wastewater Treatment Plant on Dry Creek at the end of Booth Road, and all sewer improvements would be required to be consistent with the Regional Wastewater Master Plan. The proposed wastewater lines are shown on Figure 4.12-6.

Storm Drainage and Flood Control

The Plan Area is primarily located in the watershed of Pleasant Grove Creek and the South Branch of Pleasant Grove Creek. Proposed Project improvements to the drainage system may include rechannelization and piping of minor tributaries, construction of pipe conveyance systems, construction of culverts and bridges, development of stormwater water quality treatment facilities, and construction of facilities intended to detain peak flows. An on-site detention basins have been identified in the Woodcreek West property (Neighborhood D).

Solid Waste Disposal

The City of Roseville would provide disposal service to the Plan Area. No private waste haulers are allowed to operate within the City. Solid waste would be transported and disposed of at the

Western Regional Landfill facility, located at Fiddymment Road and Athens Road. Recycling collection facilities would be located in each neighborhood in the commercial or business-professional sites.

Police Protection

The Roseville Police Department would provide police protection services to the Plan Area. Development within the Plan Area would comply with the City of Roseville's Building Security Ordinance to enhance the safety and security of residents.

Fire Protection

Phase I development would require a new fire station in order to meet the Fire Department's response time standards. A potential site has been designated in the southeast portion of the Mourier 140 property, in Neighborhood B (see Figure 4.12-2). The Mourier 140 site could serve all of Phase I within the response time standards; however, it is not in the best location to relative to other City fire protection needs. Therefore, Phase I may provide for an alternative site in the industrial area east of the Diamond Creek property in lieu of the Mourier 140 site. The final determination of the new station location will be made by the Fire Department. A second fire station has been identified in Neighborhood D (Phase II) to be located at the intersection of Pleasant Grove Boulevard and Sun City Boulevard.

Parks and Recreation

The NRSP proposes a total of four park sites in Phase I, which total 79.2 acres. In addition, Phase I proposes approximately 81.5 acres of open space, much of which is intended to preserve wetland resources and floodplains, and which provide passive recreational opportunities. Phase II of the plan proposes 29.6 acres of park and 111.7 acres of open space for a Full Project total of 302 acres devoted to parks, recreation and passive open space uses. All proposed park lands to be dedicated to the City will be unconstrained and unencumbered by environmental issues and any outstanding permits (see 3.6.3 wetlands).

Schools

Two elementary schools and a junior high school are planned for Phase I, comprising a total of 38.3 acres of land. All three schools would be operated by the Roseville City School District. In addition, the Plan Area would be served by Buljan Intermediate School located on Washington Boulevard, and Woodcreek High School located on Woodcreek Oaks Boulevard.

For Phase II, a 10-acre elementary school site is proposed in the Neighborhood D area. This school would be in the Dry Creek Joint Elementary School District. Existing and proposed school sites are shown on Figure 4.12-4 in the Public Services and Utilities section.

The Roseville City School District identified the need for a continuation high school; such a school may be included in the Plan Area or elsewhere in the City.

Library

No new library facilities are identified as part of the Proposed Project. Library services to residents of the Plan Area could be provided at the planned Mahany Park facility.

Utilities

Electric Service

The Roseville Electric Utility Department would supply electricity to the Plan Area (see Figure 4.12-3). The Roseville Electric Master Plan calls for construction of 60kV overhead lines along Fiddymment Road to Blue Oaks Boulevard, with an extension to the east along the north side of Blue Oaks Boulevard to Woodcreek Oaks Boulevard.

An electrical receiving station is located south of Pleasant Grove Boulevard and east of Fiddymment Road. An additional substation is planned north of Blue Oaks Boulevard and east of Woodcreek Oaks Boulevard in Phase I.

Street Lighting

Street lighting would be provided along all roadways in the Plan Area, at intervals in accordance with City policy.

Natural Gas

Natural gas would be provided by Pacific Gas and Electric Company.

Cable Television

Cable television service to the Proposed Project would be provided by a vendor, likely Jones Intercable.

Off-Site Improvements

Development of the NRSP will require the extension of off-site facilities to provide water, sewer and other services to the project site. The EIR addresses the potential effects of off-site improvements that are directly related to the NRSP. Off-site improvements include a water transmission line along Blue Oaks Boulevard to Industrial Boulevard, (which has been planned for and analyzed in previous city documents) the extension of 60 kV lines, an electrical substation in the east-central portion of the Diamond Creek parcel, and drainage facilities that would accompany road widenings.

3.6.5 Implementation

Development Agreements

The Proposed Project is intended to be implemented through a series of development agreements executed between the City of Roseville and the individual landowners within the study area, in accordance with the City of Roseville Zoning Ordinance. The agreements would be binding contracts between the City and the landowners which set the terms, conditions, rules, regulations, entitlements, vested rights, and other provisions relating to development of the study area. Included in the development agreements would be provisions related to the provision of infrastructure improvements, public dedication requirements, landscaping amenities, and other obligations of the parties. Development agreements typically run for a period of 20 years, run with the property, and may only be modified by mutual consent of the City and the landowner.

Zoning

All lands within the Plan Area would be zoned consistent with the zoning classifications of the Roseville Zoning Ordinance. Figure 3-7 depicts the proposed zoning for the Plan Area.

Subsequent Entitlements

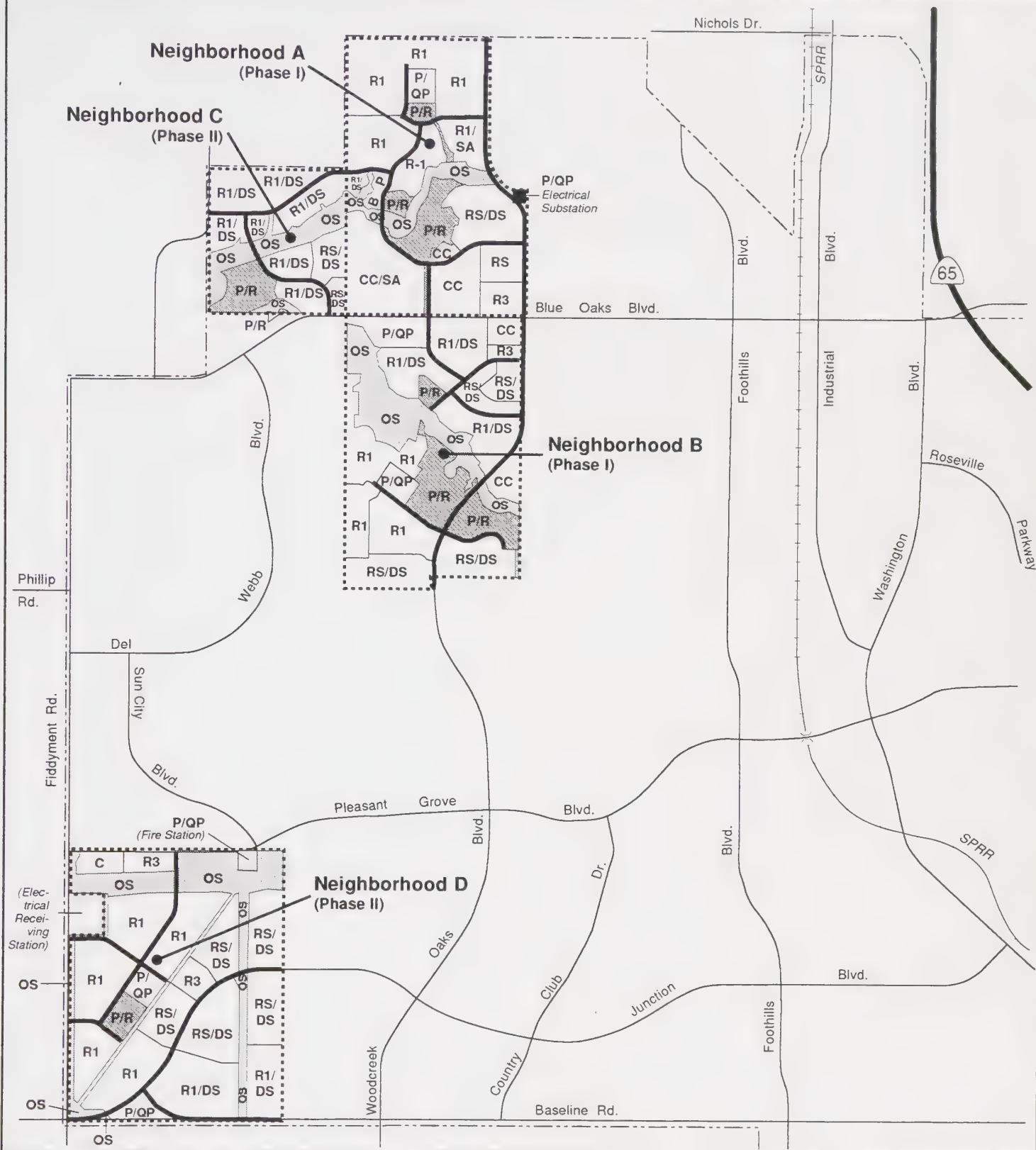
Development within the Plan Area would be subject to approval of subsequent entitlements by the City in accordance with the Zoning Ordinance and Roseville Municipal Code. Subsequent approvals may include subdivision maps, tree removal permits, and design review permit.

Dedications

All property to be conveyed to the City, including parks and open space street rights-of-way and the fire station would be free of any liens, monetary encumbrances, special taxes, hazardous materials, or assessments not approved by the City.

Financing of Public Improvements

The development of the public improvements necessary to serve the residents and businesses within the Proposed Project would be funded through a variety of means including creating a Community Facilities District (CFD), and/or statutory assessment districts may be formed to fund basic sewer, water, drainage and street improvements. The specific method of financing would be established in individual development agreements between the City and each landowner.



..... Neighborhood Boundary Within Specific Plan Area

--- Roseville City Limits

Open Space

Parks

— Existing and Approved Roads

— Proposed Roads

R1=Single Family (low and medium density)

R1/SA=Single Family/Special Overlay

R3=Attached Housing (high density)

R3/SA=Attached Housing/Special Overlay

BP=Business Professional

CC=Community Commercial

DS=Development Standard/Overlay Zone

OS=Open Space

P/QP=School/Park/Fire Station

P/R=Park

SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996; EIP Associates, May 1997.

Figure 3-7

Zoning Designations

0 1/4 1/2

Scale In Miles

↑

N

↓

96063

Base

ENDNOTES

1. City of Roseville, Roseville General Plan Housing Element, "Summary of Population and Housing Characteristics," p. X-5, 1992.

4. ENVIRONMENTAL ANALYSIS

4.0 INTRODUCTION TO THE ANALYSIS

4.0 INTRODUCTION TO THE ANALYSIS

TOPICS ADDRESSED

The Environmental Analysis section of this EIR discusses the environmental setting, impacts and mitigation measures for each of the following topics:

- Land Use
- Population, Employment and Housing
- Soils, Geology and Seismicity
- Hydrology and Water Quality
- Biological Resources
- Cultural Resources
- Aesthetics and Visual Resources
- Hazardous Materials and Public Safety
- Transportation and Circulation
- Air Quality
- Noise
- Public Services and Utilities

ANALYSIS ASSUMPTIONS/SECTION FORMAT

Each section begins with a description of the project **environmental setting** and a **regulatory setting** as it pertains to a particular issue. The environmental setting provides a point of reference for assessing the environmental impacts of the Proposed Project and alternatives. For a majority of the environmental factors – land use, geology, hydrology, biological resources, cultural resources, aesthetics, and hazardous materials – the existing conditions were selected as the baseline scenario to which the Proposed Project is added. For these issues, existing conditions represent the most conservative ("worst-case") scenario for development of the project. For the analysis of the remaining environmental factors – traffic, air quality, noise, water supply and wastewater treatment and conveyance – Year 2010 market conditions were used as the baseline scenario to which the Proposed Project is added. For these factors, 2010 market conditions present the most conservative ("worst case") scenario for development. An additional analysis for these environmental factors using existing conditions as the baseline scenario is included in Appendix D of this Draft EIR.

At the time this Draft EIR was prepared, the Highland Reserve North (HRN) and Stoneridge Specific Plans were in the planning stages. Based on the likely sequence of approvals, the HRN would be approved prior to the Proposed Project. For that reason, the HRN is included in the

baseline condition upon which the Proposed Project is analyzed. Both the HRN and Stoneridge plans are included in the cumulative analysis.

As described in Chapter 3, Project Description, the Proposed Project analyzes two development scenarios: Phase I and Full Project (Phases I and II combined). This was done to clearly identify the environmental impacts associated with development of this area. Phase I includes approximately 736 acres located west of Foothills Boulevard and bisected by the recent westward extension of Blue Oaks Boulevard; Phase II consists of approximately 654 acres on two discontinuous parcels located west of Phase I. The Full Project scenario includes the development of Phases I and II combined.

The impact analyses contained within each section are divided into Phase I impacts and Full Project impacts. In most cases, the types of impacts for both development scenarios are the same, although the degree of impact is greater in the Full Project development scenario. Each impact is separately-numbered with numbered impacts for the Phase I development scenario followed by the letter designation (A), while the Full Project development scenario is identified by the letter designation (B).

The setting description in each section is followed by an **impacts** and **mitigation** discussion. The impact and mitigation portion of each section includes impact statements, which are prefaced by a number in bold-faced type. An explanation of each impact and an analysis of its significance follows each impact statement. Mitigation measures pertinent to each individual impact appear after the impact section. The degree of relief provided by identified mitigation measures is also evaluated. An example of the format is shown below.

| | |
|--------------------------------|---|
| IMPACT 4.X-1(A) OR (B): | Statement of impact in bold type. |
| SIGNIFICANCE: | Statement of Significance without mitigation (Less than significant, Significant) |
| MITIGATION MEASURE: | Mitigation Measure 4.X-1(a) |
| RESIDUAL SIGNIFICANCE: | Significance after mitigation |

Discussion of impact in paragraph format.

4.X.X MITIGATION MEASURES

Following the impact analysis in each section is an explanation of the previously identified Mitigation Measures. This section provides additional detail about each measure.

4.X-X(A) OR (B)¹ MITIGATION MEASURE

Mitigation Measure 4.X-1(a): **Summary of mitigation measure.**

Mitigation Measure 4.X-1(b): **Summary of mitigation measure.**

¹ Note that some mitigation measures may apply to an impact for both Phase I (A) and Full Project (B).

Mitigation Measure 4.X-1(c): Summary of mitigation measure.

Statement of whether the mitigation measure applies to Impact 4.x-x(A) and/or 4.x-x(B).

This section restates the mitigation measures identified in the Impacts section, and provides additional information regarding the steps that must be taken to implement each measure.

4.1 LAND USE

4.1 LAND USE

4.1.1 INTRODUCTION

This section of the EIR addresses the existing and planned land uses of the NRSP and adjacent areas. The discussion includes the following:

- a description of the land use setting, including existing land uses in the Plan Area and in adjacent areas;
- an analysis of the potential to change the existing type, intensity or pattern of land uses on and in the vicinity of the Plan Area in relation to existing and foreseeable uses;
- a discussion of the potential for development of land uses in the Plan Area that are incompatible with existing land uses in the project vicinity;
- a discussion of the conversion of farmland to non-agricultural uses;
- a discussion of potential impairment of the productivity of adjacent or nearby farmland; and
- an analysis of potential conflicts with the City's General Plan.

Both Phase I and the Full Project (Phases I and II combined) are evaluated using existing conditions as the baseline against which impacts are assessed.

4.1.2 ENVIRONMENTAL SETTING

The NRSP is located within the City of Roseville in Placer County, California. The City of Roseville establishes land use designations and policies primarily through its General Plan and various specific plans. Planning policies are implemented through infrastructure plans and programs, the zoning and subdivision ordinances, and the development review process. A list of General Plan policies that are applicable to the Plan Area is presented in Appendix C.

Land Uses in the Project Vicinity

City of Roseville

The Plan Area lies along the northern and western boundaries within the incorporated limits of the City of Roseville, in Placer County. Historically, the Roseville region has been dominated by agricultural activities, most notably ranching. Large ranches, including the Fiddymment Ranch and the Kaseberg Ranch, adjacent to portions of the Plan Area, and the Spring Valley Ranch, which encompassed a major portion of the North Central Roseville Specific Plan area, began active operations in the mid-1800s.¹ Grazing has continued to the present throughout the region. Other agricultural activities have also continued, including poultry production and production of wheat, raisins, grapes, oranges, and nuts.²

The City of Roseville has experienced sizeable growth during the past decade. This has been reflected in all areas of the city. Within the Northwest Roseville Specific Plan area, numerous residential developments have been completed or are under construction along Woodcreek Oaks Boulevard and Pleasant Grove Boulevard. The Del Webb Specific Plan was approved in 1993 and development is underway on 1,200 acres east of Fiddymment Road. East of the Plan Area are light industrial uses including the existing Hewlett-Packard facility and the recently approved Master Plan expansion project, Albertson's Distribution Center, and the NEC semi-conductor manufacturing facility. In addition, the vacant Lantech Business Park is located between NEC and Albertson's. These industrial uses are a major source of employment within the city.

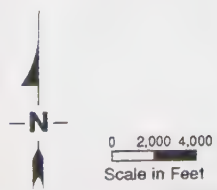
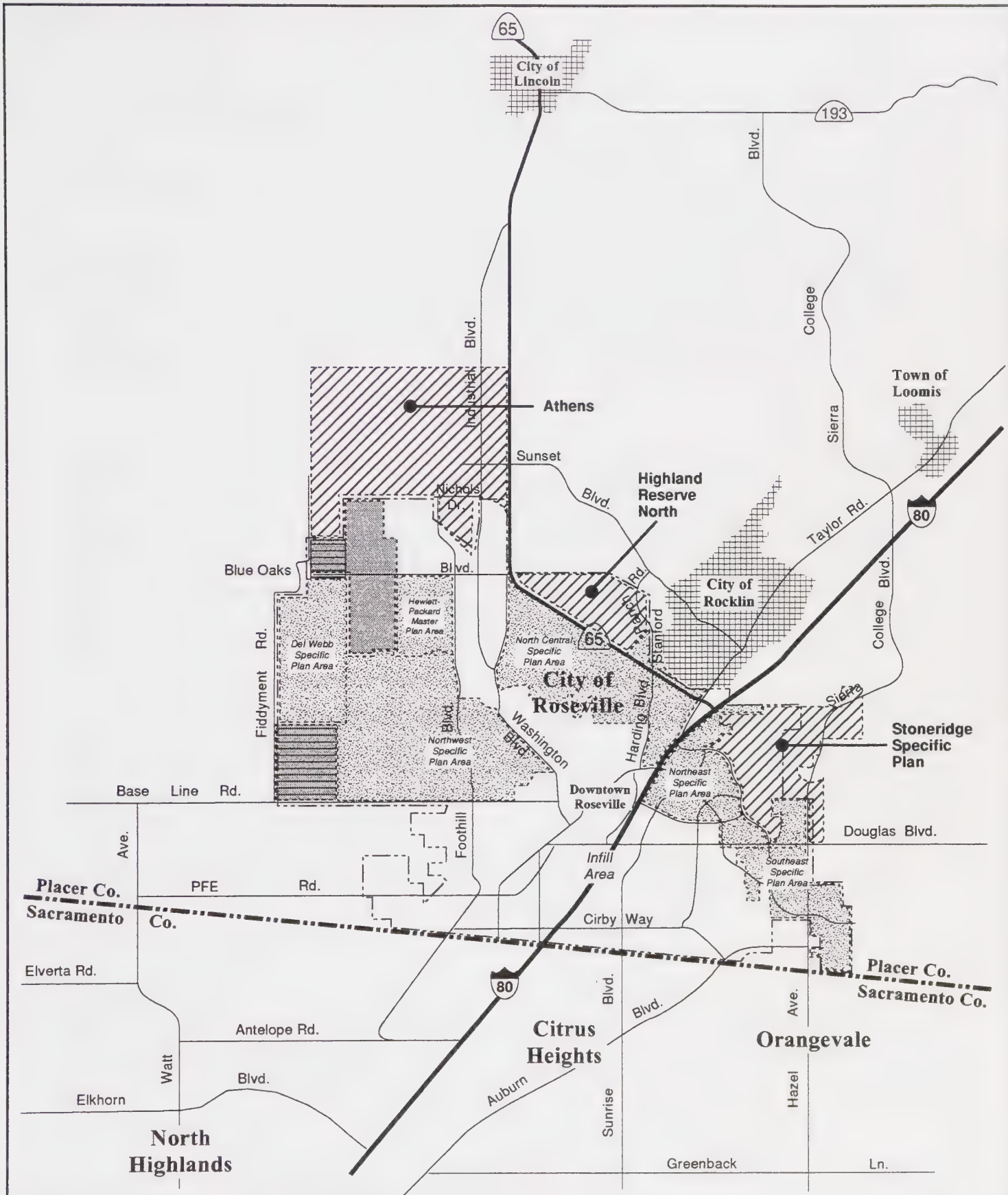
Agricultural open space is located west of the Plan Area in lands under Placer County's jurisdiction. A pistachio orchard (Fiddymment Farms) is located west of the Plan Area across Fiddymment Road.

Mahany Park is located adjacent to Pleasant Grove Boulevard and Woodcreek Oaks Boulevard, east of Neighborhood D (Woodcreek West Property). It is a citywide park maintained by the City of Roseville.

The City has adopted three plans that border or are near the Proposed Project (see Figure 4.1-1). These are the Northwest, the Del Webb, and North Central Specific Plans. The Highland Reserve North Project, an amendment to the North Central Roseville Specific Plan, has also been proposed recently and is the subject of an EIR published by the City December 2, 1996. These plans have been developed to address growth issues and the unique constraints and opportunities found within each area, as well as to provide a context within which implementation of the land use plan and associated public facilities can be successfully accomplished.

Northwest Roseville Specific Plan

The Northwest Roseville Specific Plan (NWRSP) was adopted in May 1989. This specific plan includes 2,754 gross acres located immediately south and east of the Plan Area within the western portion of the City. Single and multifamily residences are the dominant land use, with associated commercial, office and service uses. The NWRSP also incorporates a significant amount of parkland and open space, the City's Woodcreek Golf Club, and several school sites, including the



[Diagonal Hatching] North Roseville Specific Plan Area (Phase I)
 [Horizontal Hatching] North Roseville Specific Plan Area (Phase II)
 [Dotted Pattern] Approved Specific/Master Plan Areas
 [Dashed Line] Roseville City Limits
 SOURCE: City of Roseville, February 1995; EIP Associates, March 1997.

Figure 4.1-1
Land Use Areas

Woodcreek Oaks High School. The NWRSP is partially developed and is expected to accommodate approximately 24,000 residents and provide 4,200 jobs at buildout.

Del Webb Specific Plan

The Del Webb Specific Plan (DWSP), adopted in December 1993 and currently under construction, is an age-restricted community encompassing 1,200 acres on the northwest side of the City, situated south of Blue Oaks Boulevard and east of the City's western boundary. The Specific Plan consists of primarily single family homes focused around recreational facilities and a golf course. At full buildout the development will include 3,500 dwelling units and 23 acres of commercial property.

The North Central Roseville Specific Plan

The North Central Roseville Specific Plan (NCRSP) was adopted in July 1990. The NCRSP covers 2,514 acres and is generally situated between I-80 and Washington Boulevard, north of the Diamond Oaks Golf Course, and northeast of the North Roseville Specific Plan Area. It is traversed by State Route 65. When fully developed, the NCRSP is planned to provide a diverse mix of residential, commercial, office and light industrial uses, regional commercial sites and a wetland preservation/mitigation compensation area. The majority of the NCRSP area north of State Route 65 is within the city's urban reserve. Limited development has occurred in this area to date. At buildout, the NCRSP area is expected to accommodate approximately 12,000 residents and 16,000 jobs.

The Highland Reserve North (HRN) Project consists of the urban reserve portion of the North Central Roseville Specific Plan area. The HRN area encompasses approximately 615 acres immediately north of State Route 65. The land uses include single and multi-family residential, commercial, schools, parks, and open spaces. The Draft EIR for the project was circulated for public review, beginning in December 1996.

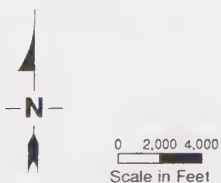
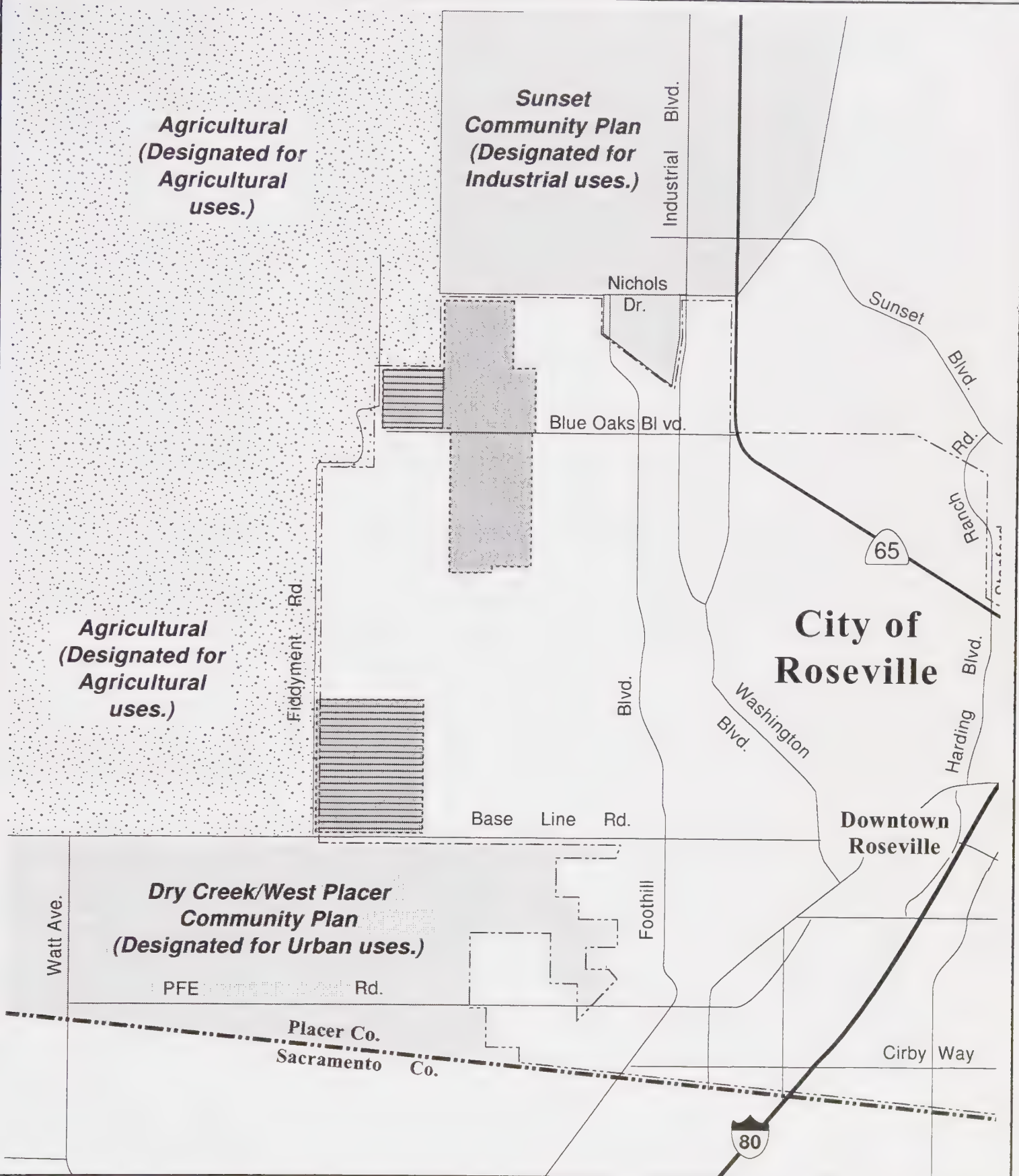
An additional Specific Plan has been proposed recently--the East Roseville (Stoneridge) Specific Plan. This specific plan is under preparation, along with accompanying environmental documents.

Hewlett-Packard Master Plan

Hewlett-Packard has a major facility in the NRIA. A Master Plan has been adopted for the undeveloped portion of the Hewlett-Packard property immediately east of the Plan Area. The Hewlett-Packard Master Plan provides for 2.3 million square feet of new light industrial uses and 248,000 square feet of commercial uses.

Placer County

As shown in Figure 4.1-2, the Sunset Community Plan is north of the Plan Area and is designated light industrial, and the area to the west of the Plan Area is designated Agricultural by Placer County. The Athens Area, which is immediately north of the Plan Area is a portion of the Sunset Industrial Area designated Industrial Reserve in the Sunset Community Plan and Business



- | | | | |
|--|---|--|-----------------------|
| | North Roseville Specific Plan Area (Phase I) | | Community Plan Areas |
| | North Roseville Specific Plan Area (Phase II) | | Agricultural (AG-80) |
| | | | Roseville City Limits |

SOURCE: City of Roseville, May 1997; EIP Associates, May 1997.

Figure 4.1-2

**Placer County
Land Uses**

96063
Sub-Regn



Park/Industrial in the Placer County General Plan. Although the area continues to be predominately agricultural in character, some limited industrial uses have been developed, including a cogeneration facility and landfill. The area north of the Diamond Creek property (Neighborhood A) is designated industrial reserve in the 1980 Sunset General Plan. Placer County recently published the *Draft Sunset Industrial Area Plan*, which provides land use designations and policies to guide development in approximately 8,900 acres immediately north of the Plan Area. Land uses under the draft plan would include business park, industrial, general commercial, agriculture, public facility, and open space. The area adjacent to the Diamond Creek property (Neighborhood A) would continue to be designated Industrial Reserve, which would permit agriculture, recreational and entertainment activities compatible with industrial uses, and solid waste disposal and processing activities, as permitted in the Farm Zone District.³

A proposal has been made to locate an amphitheatre in the Sunset Industrial Area. The amphitheatre would be located on 20 acres on a 113-acre site, and would include fixed seating for 10,000 with a rear lawn area that could accommodate an additional 13,000. Initially, roadway improvements would be adequate for only 18,000 attendees, so the County would limit events to this size.

Agricultural lands predominate in the area west of Fiddymont Road. These agricultural lands are classified by the California Department of Conservation as Farmland of Local Importance or Grazing Land, with a small amount of Prime farmland. The area west of Fiddymont Road, from Baseline Road to Pleasant Grove Creek, and west of the Sutter County line, has been designated a "Study Area" on the Placer County General Plan which identifies this area as an appropriate location for growth beyond that allowed in the Placer County General Plan.⁴

Two community plans prepared by the County cover land in the vicinity of the Proposed Project. The Sunset Community Plan (1980) covers the area adjacent to the north of the Plan Area. The Dry Creek-West Placer Community Plan (1990) encompasses the area southwest of Neighborhood D (See Figure 4.1-2).

During the update of the County General Plan, three additional plan areas were under consideration in the vicinity of the Proposed Project. Placer Villages, a 15,700-unit mixed-use residential development, was proposed approximately one mile west of the Plan Area. Stanford Ranch West, a 8,730-unit mixed-use residential development, was proposed north of the Plan Area (within the City of Roseville's sphere of influence). Both of these planning areas have been eliminated from the County's adopted General Plan and are no longer being considered.⁵ The Villages at Blue Oaks was proposed for future development to the west of the Proposed Project. This project covers 4,000 acres and would accommodate 11,800 dwelling units in a mixed-use environment. An application was submitted in December 1992 to the City of Roseville for a sphere of influence amendment/annexation request for Phase I, but the application is no longer active.⁶

Land Uses within the Plan Area

The majority of the Plan Area is undeveloped annual grasslands. The topography is relatively level with gently rolling hills. There are some dispersed oaks, oak woodlands and riparian creek corridors. Agricultural grazing still occurs in portions of the Plan Area.

Existing Land Uses In Neighborhoods A and B (Phase I)

Cattle and sheep have grazed in portions of Phase I for several decades. There are no standing structures on the Mourier 140 or Woodcreek North properties (Neighborhood B) other than barbed wire fences and a few wooden fence posts. The Woodcreek North property does contain a small dam and a 1.4-acre reservoir both of which are part of a 10-acre wetlands mitigation area.

A cultural resources report prepared by Peak & Associates, Inc. (1994), identified four human-made structures on the Diamond Creek property (Neighborhood A).⁷ All four structures are generally located in the center of the property. Structure 1 consists of a single-story, rectangular, woodframe structure with a gabled roof and an enclosed porch. The structure is used as storage shed. Structure 2 consists of a two-story, rectangular, wood-pole outbuilding. The building is used for equipment storage. Structure 3 consists of a single-story, rectangular, woodframe structure set on cement pier blocks. Its previous use is unknown. Structure 4 consists of a large, rectangular, single-story structure resting on a cement slab. The building appears to have been used in poultry raising.

The City of Roseville General Plan designates the Woodcreek North property as Urban Reserve. The General Plan defines Urban Reserve areas as "lands that are anticipated to receive urban land entitlements, but at the present time are constrained by growth management policies, availability of services, or other limitations."⁸ Other Urban Reserve designations are found in north central and northeast Roseville.

The Diamond Creek and Mourier 140 properties have a General Plan designation of Light Industrial. This land use category is applied to lands reserved for office, industrial, and research and development uses.

Existing Land Uses In Neighborhood C and D (Phase II)

There are no standing structures in Phase II other than power lines, barbed wire fences and wooden fence posts. An abandoned underground water line is present on Neighborhood C (Walaire 160) and appears to be representative of the former use of the property for irrigated pasture or perhaps other crops.⁹ Neighborhood D (Woodcreek West) has high-voltage powerlines crossing the northern portion of the property. Beneath these powerlines, there is a 10-acre vernal pool preserve which was created as wetland mitigation for the Northwest Roseville Specific Plan. This property has been dry farmed in the past.¹⁰

The City of Roseville General Plan designates Phase II as Urban Reserve. The Urban Reserve land use designation is applied to those lands anticipated to receive future land entitlements.¹¹ Other Urban Reserve designations are found in north central and northeast Roseville.

Land Ownership Within the Plan Area

The Plan Area brings together six properties under four separate ownerships. The pattern of property ownership is shown Figure 3-3, Property Ownership Map. The ownerships and their related parcels include Diamond Creek Partners, Ltd. (312.1 acres), Eskaton (Easkaton Village--

50.8), Mourier Land Investment Corporation (Mourier 140--140.5 acres and Walaire 160--161 acres), and Sammis Roseville Associates (Woodcreek North--232.9 acres and Woodcreek West--492.6 acres).

The Plan Area is known by the following assessor's parcel numbers: Diamond Creek Property (APN 17-110-065), Eskaton (a portion of APN 17-110-065), Mourier 140 (APN 17-230-09), Walaire 160 (APN 17-110-05), Woodcreek North (APN 017-023-07) and Woodcreek West (APN 017-160-024, 025, 037, 038, and 039).

Agricultural Status

The California Department of Conservation (CDC) Farmland Mapping and Monitoring Program has classified the Plan Area into two categories (see Figure 4.1-3, Farmland Classification):

■ Farmland of Local Importance:

This classification generally applies to the area in Phase I north of Pleasant Grove Creek, and Neighborhood D (Woodcreek West) in Phase II. As defined by Placer County¹², these are farmlands not covered by the Prime, Statewide or Unique categories, and include lands zoned for agriculture by County Ordinance and the California Land Conservation Act, dry farmed lands, irrigated pasture lands, and other agricultural lands of significant economic importance to the County, and lands that have a potential for irrigation from Placer County water supplies.

■ Grazing Land:

This classification generally applies to the area south of Pleasant Grove Creek and all of Neighborhood C (Walaire 160). As defined by the CDC, these are lands on which existing vegetation is suited to the grazing of livestock.

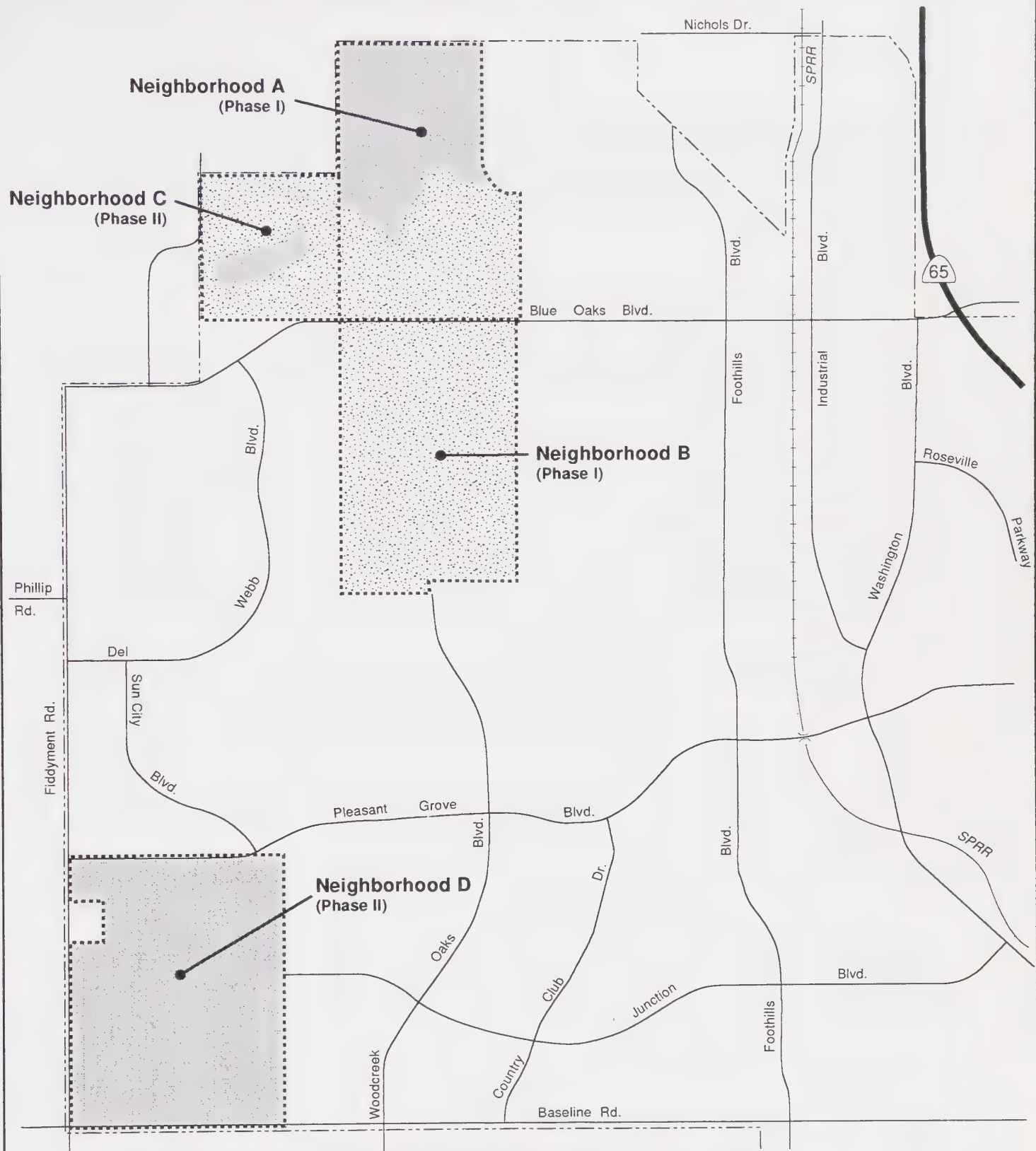
Farmland to the west of the Plan Area is typically classified as Farmland of Local Importance or Grazing Land.

None of the Plan Area is restricted to agricultural uses under the Williamson Act, which is a nonmandated State policy providing for a preferential assessment of agricultural and open space lands that meet local size and use criteria. County properties located west of Fiddymment Road, north of Phillips Road and west of the North Urban Reserve Area are under Williamson Act contract. These include a portion of the Fiddymment Ranch and the pistachio orchard. Nonrenewal notices for these properties were filed in 1987; contract phase out will occur by 1996.

4.1.3 REGULATORY SETTING

Framework of Land Use Plans in Roseville Planning Area

The City of Roseville establishes land use designations and policies through the General Plan and various specific plans. Planning policies are implemented through infrastructure plans and



- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads

- Farmland of Local Importance
- Grazing Land

Figure 4.1-3

Farmland Classification

SOURCE: City of Roseville, *City of Roseville West Roseville Baseline Studies*, September 1992; California Department of Conservation, *Placer County Important Farmland Map 1990*, released March 1992; EIP Associates, May 1997.

0 1/4 1/2
Scale In Miles



96063
Base



programs, the zoning and subdivision ordinances, and the development review process. While the formal responsibility for land use decisions in territory located outside the City limits and within its sphere of influence resides with Placer County, the City receives notices from the County and provides comments (as appropriate) on development proposals within the sphere.

City of Roseville

General Plan

The City of Roseville last completed a comprehensive update of its General Plan in 1992. This General Plan update addressed goals, policies, and implementation measures, but did not modify land uses or land use allocations beyond those identified in the previous General Plan. Prior to the 1992 Update, the General Plan had not been comprehensively updated since 1977. The Land Use Element had been last updated in 1984. The land use element establishes goals, policies, and accompanying implementation measures related to land uses and development, and designated the general distribution and intensity of residential, commercial, industrial, public and semi-public, open space, and other land uses. Since 1992, there has been only one modification to the land use allocation of the General Plan. This modification increased the City's dwelling unit allocation from 35,700 to 39,200 for the Del Webb Specific Plan. It is anticipated that Roseville's supply of residential land allocated in the General Plan will be exhausted prior to the Year 2005.

General Plan policies are identified, where applicable, in the technical sections (Chapter 4) of this DEIR. A presentation of the City's General Plan policies can be found in Appendix C.

Specific Plans

A specific plan is a policy or regulatory tool for the systematic implementation of the General Plan. It contains a set of land use designations and implementation programs reflecting the unique characteristics of the particular area. A specific plan is required to be consistent internally and with the General Plan. In Roseville, specific plans are incorporated into the General Plan by reference.

At the present time, five areas of the City are governed by Specific Plans, including two areas that border on or are near the Plan Area. These plans have been developed to address growth issues and the unique constraints and opportunities found within each area, and provide a context within which implementation of the land use plan and associated public facilities can be successfully accomplished. These plan areas include the NWRSP and Del Webb. In addition, the North Industrial area has been designated for industrial development, but no formal specific plan has been completed for this area. At the present time, the Del Webb and the NWRSP areas are the only specific plan areas immediately adjacent to the Plan Area (see page 4.1-2 for a description of these plans).

North Roseville Industrial Area

The North Roseville Industrial Area (NRIA) is recognized as a planning subarea of the City of Roseville. The NRIA consists of 2,443 acres devoted to existing and planned industrial uses. The

NRIA is intended to provide a major employment/industrial center for the South Placer region which will ultimately accommodate approximately 31,346 jobs at total buildout. Presently, a majority of the area remains undeveloped.¹³ Design guidelines were adopted in June 1992 that are intended to guide physical development in the area. In 1995, the Hewlett-Packard Master Plan was approved to develop the remaining 300 acres owned by Hewlett-Packard, which are entirely located within the NRIA.

Zoning Ordinance

The City's Zoning Ordinance is a tool to implement the broad policies contained in the General Plan. Zoning focuses on the immediate uses of land rather than the longer-term, planned uses contained in the General Plan. Typically, a General Plan land use designation allows a broader use of the property and a zoning classification restricts the uses further by, specifying particular uses and development intensity standards.

State law has imposed consistency requirements to ensure that local zoning ordinances conform to the General Plan (although charter cities with a population of fewer than two million, such as the City of Roseville, are exempt). To ensure that the zoning ordinance is consistent with the General Plan, the Plan itself must be complete, adequate and internally consistent. Typically, a General Plan and zoning ordinance are consistent when they allow the same general range of types, density, and intensity of development at the same location. Zoning that becomes inconsistent as the result of adoption of a new General Plan must be changed to become consistent within a reasonable time.

The City's Zoning Ordinance was last updated comprehensively through Ordinance No. 3014 on May 22, 1996. Periodic revisions are planned to keep the zoning ordinance up to date.

Placer County

Placer County updated the County General Plan in 1994. The Placer County General Plan (Agricultural Element) presently designates all of the area west of Fiddymont Road as Agricultural/80-acre minimum; the associated zoning includes an 80-acre minimum Farm Zone.¹⁴

In addition, Placer County has recently adopted a one-mile buffer for the Western Regional Sanitary Landfill located on Fiddymont and Athens Road. The northernmost boundary of the Plan Area is located over 1.0 mile from the southern boundary of the landfill facility.

4.1.4 IMPACTS

The impacts of the Proposed Project are measured against existing conditions, which are primarily undeveloped grasslands, creeks and riparian areas. It should be noted that three of the properties in Phase I, Diamond Creek, Eskaton and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impacts are not measured against development of these light industrial designations, the EIR can be considered a "worst-case" analysis for those impacts that would occur under light industrial designations. That is, if the Proposed Project were compared

to developing the Plan Area under existing entitlements, those impacts would be different and generally less severe from those identified below.

Method of Analysis

Agriculture

The CDC has developed a Farmland Mapping and Monitoring Program that classifies the different agricultural soil types related to their ability to sustain agricultural crops and for lands on which existing vegetation is suited to the grazing of livestock.

Land Use

Existing and planned land uses in the Plan Area have been identified based on a site visit by EIP Associates staff and information provided by the City of Roseville Planning Department, the Applicant and its consultant team. The land use evaluation is based on a qualitative comparison of existing and proposed uses on the site and their compatibility with existing and planned land uses as defined in the City's General Plan and/or relevant Specific Plans, as well as other applicable local and/or regional environmental and planning documents.

Consistency with the General Plan

Implementation of the Proposed Project would result in an amendment to the Roseville General Plan and a change in the existing zoning in the Plan Area. These changes would alter existing land use plans by changing lands currently planned for light industrial and urban reserve uses to residential, open space, community commercial, business-professional and public/quasi public uses. The Proposed Project relies on approval of the applicant's proposed General Plan Amendment to be consistent with the General Plan.

Standards of Significance

The evaluation of land uses for the proposed NRSP is based on an analysis of the types of impacts generated by the proposed land uses on the site and compatibility with existing and planned adjacent land uses. Significant impacts are identified in cases where the proposed changes in type and intensity of land uses are incompatible with uses on or adjacent to the site. This analysis assumes implementation of applicable General Plan policies, Improvement Standards, and design standards, prior to determining significance, so these requirements do not appear as mitigation measures.

For purposes of this analysis, an impact is considered significant if implementation of the NRSP could:

Agriculture

- Lead to the impairment of the productivity of adjacent or nearby prime farmland;

Land Use

- Lead to development of land uses that are incompatible on the site or change the character of existing and/or proposed adjacent land uses; or
- Result in a conflict with the primary goals, general directions or stated intention of applicable local plans.

It is important to note, for policies that are permissive, the Proposed Project would not be considered inconsistent unless implementation of the project would clearly impede the intent of the policy. If the Proposed Project does not satisfy all aspects of a particular policy, but generally meets the intent of the policy, it would not be considered inconsistent.

PHASE I IMPACTS

| | |
|----------------------------|-----------------------------|
| IMPACT 4.1-1(A): | Land use conversion. |
| SIGNIFICANCE: | Less than significant |
| MITIGATION MEASURE: | None required |

Phase I of the Proposed Project would convert approximately 736 acres of land that is designated Light Industrial and Urban Reserve to a mixture of residential, commercial, office, schools, park, Public/QP, and open space uses. The City of Roseville General Plan currently designates approximately 493.5 acres in the northern portion of Phase I for Light Industrial uses and approximately 231 acres southwest of the South Branch of Pleasant Grove Creek as Urban Reserve. The land use conversion of Light Industrial and Urban Reserve to mixed use would represent a change in the designated land use on the site. A market absorption study was prepared for the City in 1996. The study found that the City had a capacity for 20 million square feet (msf) of industrial space on undeveloped land designated industrial (not including the Athens area, which would add another 23 msf). The demand for industrial space was projected to reach 12.33 msf by 2020, so there would be a surplus of almost 8 msf without the Athens area and 31 msf with the Athens area. Conversion of the light industrial portion of the Plan Area would remove approximately 4 msf to 6 msf (assuming a floor area ratio of 0.2 to 0.3 and 460 developable acres, with the remaining acreage remaining in open space/floodplain). By 2010, 1.57 msf were expected to be built in the Plan Area's Light Industrial areas. Given the surplus of industrial land relative to projected demand, the conversion of the Plan Area's Light Industrial designation as proposed in the NRSP is considered a less-than-significant impact.

The change in 231 acres of land designated for Urban Reserve to other land uses and zoning is allowed under the policies established for uses of Urban Reserve areas in the General Plan's Land Use Element. The Urban Reserve designation is applied to those lands that are anticipated to receive urban land entitlements, but at the present time are constrained by growth management policies. The Proposed Project represents a logical extension of existing areas of development. Although urbanization is already anticipated, the properties are currently open space and grasslands. The 1992 General Plan adopted findings of overriding consideration for the loss of open space and grassland.

| | |
|----------------------------|--------------------------------------|
| IMPACT 4.1-2(A): | Agricultural land conversion. |
| SIGNIFICANCE: | Less than significant |
| MITIGATION MEASURE: | None required |

Phase I of the Proposed Project would convert 736 acres of undeveloped land to developed land for mixed use (residential, commercial, business professional, open space, parks, Public/QP and schools). This would result in the loss of these lands for grazing purposes. The northern portion of Phase I is designated by the CDC as Farmland of Local Importance. The southern portion is designated as grazing lands. A portion of the approximately 736 acres that comprise Phase I are still used for seasonal grazing land. The conversion of grazing land (for cattle and sheep grazing purposes) and Farmland of Local Importance is considered a less-than-significant impact, because of the relatively low value of the property for agricultural purposes as defined by the Farmland Mapping and Monitoring Program and because the Plan Area is not irrigated.

| | |
|----------------------------|---|
| IMPACT 4.1-3(A): | Incompatibility of proposed land uses with the adjoining DWSP, NWRSP, and Hewlett-Packard Master Plan. |
| SIGNIFICANCE: | Less than significant |
| MITIGATION MEASURE: | None required |

The adjacent planning areas, the DWSP, NWRSP and Hewlett-Packard Master Plan (HPMP), each contain a variety of design and site development guidelines aimed at maximizing development quality and establishing the communities (and the neighborhoods within) as distinctive, interactive areas of growth that are compatible with each other. Although no policies exist in the General Plan that mandate design continuity between specific plan areas, the required policy consistency between each specific plan and the General Plan does facilitate functional continuity. The City of Roseville Community Design Guidelines (along with a Parks Master Plan and Master Bikeway Plan) have been adopted by the City of Roseville to further assure a unified approach to public access, recreation and design quality. The Proposed Project also incorporates specific design detail (e.g., landscape treatment along Blue Oaks Boulevard and Woodcreek Oaks Boulevard) to tie into the adjoining standards established in the existing specific plans to the extent practical.

Based upon a general comparison of the existing specific plans and the Plan Area, no potential incompatibilities were identified. Adjacent land use designations and zoning are shown in Figures 4.1-4 and 4.1-5. The land uses in the NWRSP and DWSP which are adjacent to the NRSP are residential. The NRSP proposes low density residential land use adjacent to Del Webb and the NWRSP so the uses are compatible. The HPMP provides for light industrial uses in a campus-like setting, similar to the existing HP facility. Such light industrial development would have to comply with existing General Plan policies and City ordinances, and nuisances that are sometimes attributed to industrial uses, such as noise, extensive lighting, or odors, would not be expected from the HP development. NRSP land uses proposed adjacent to the HPMP are MDR, BP and a very minor amount of LDR. These uses are considered to be compatible with the Light Industrial Campus style land use pattern of the HPMP. In addition, circulation interconnections appear complete; adjacent uses are similar or complimentary; important open space corridors

Figure 4.1-4

**Surrounding
Land Uses**

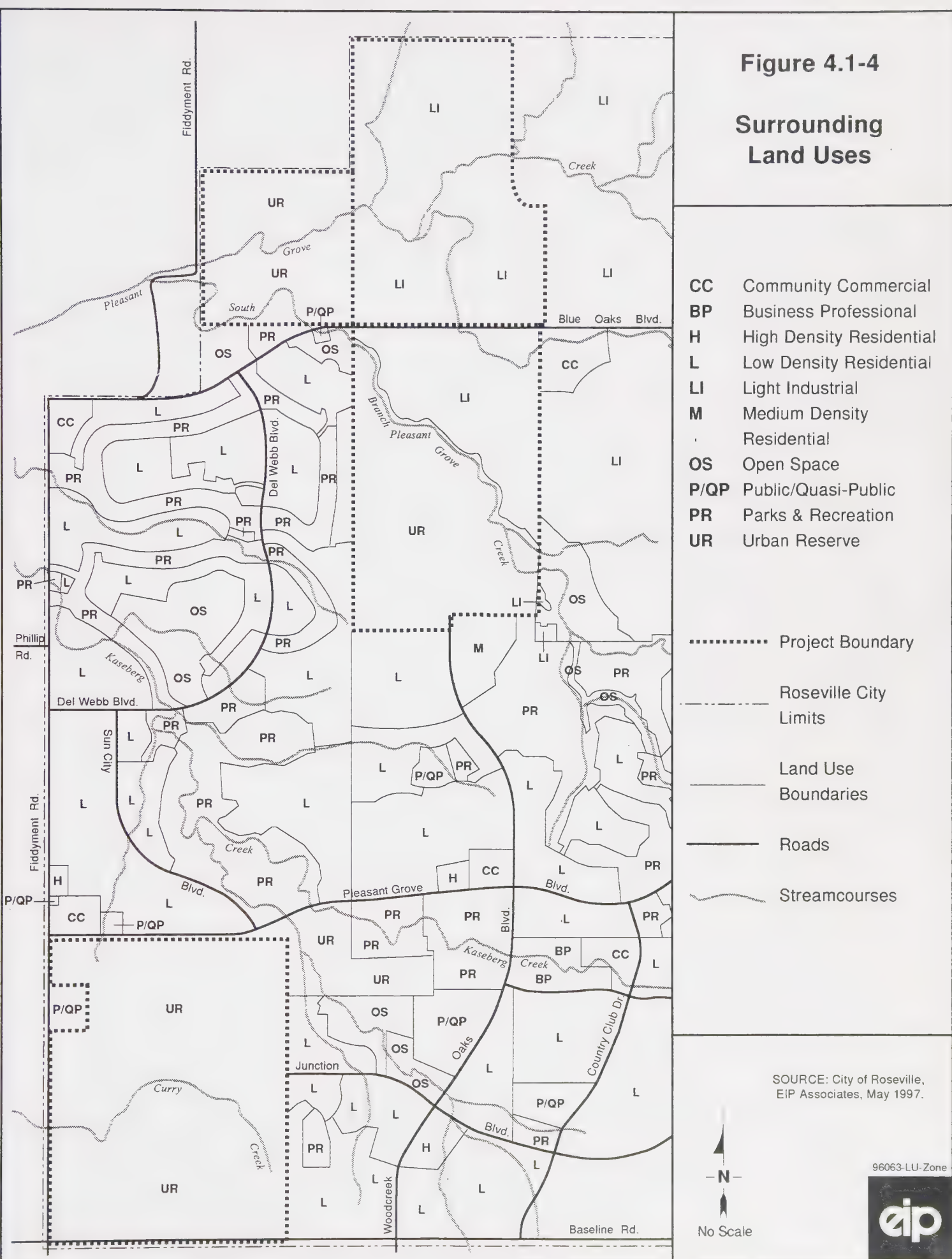


Figure 4.1-5

**Existing
Zoning**

| | |
|--------------|---|
| BP/ | Business Professional/ |
| SA-NW | Special Area-Northwest Roseville |
| CC/ | Community Commercial |
| GC/SA | General Commercial/Special Area-North Industrial |
| H | High Density Residential |
| L | Low Density Residential |
| M | Medium Density Residential |
| M1 | Light Industrial |
| OS | Open Space |
| PR | Parks & Recreation |
| P/QP | Public/Quasi-Public |
| RMU/ | Residential Mixed Use |
| SA-NW | Special Area-Northwest Roseville |
| SA-DW | Special Area-Del Webb |
| UR | Urban Reserve |
| R1 | Single-Family Residential |
| R3 | Attached Housing |
| R1/DS | Single-Family Residential/ Development Standards |
| RS/DS | Residential Small Lot / Development Standards |

..... Project Boundary

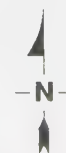
----- Roseville City
Limits

—— Land Use
Boundaries

—— Roads

~~~~ Streamcourses

SOURCE: City of Roseville,  
EIP Associates, May 1997.



No Scale

96063-LU-Zone







remain continuous; and design themes would not be expected to conflict. Therefore, potential incompatibilities are considered a less-than-significant impact.

|                            |                                                                                                               |
|----------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.1-4(A):</b>    | <b>Incompatibility of proposed land uses with the existing adjoining agricultural areas in Placer County.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                                         |
| <b>MITIGATION MEASURE:</b> | None required                                                                                                 |

In the northern portion of Phase I, the north and west side of the Diamond Creek property are adjacent to county agricultural lands (north of Diamond Creek is proposed for Industrial Reserve, see below). The majority of the agricultural activity is low-intensity seasonal grazing. The proximity of residential use would not be a conflict with the level of agricultural activity on these edges due to buffers contained in the Proposed Project. Nonetheless, agricultural landowners could express concern about the effect of developing adjacent land for residential uses on the ability of the farmer to use and maintain his or her property for agricultural production. Residential development sometimes leads to complaints about agricultural operations, such as the drift from aerial spraying or seeding, dust and noise from agricultural equipment operations, and odors from animals. These complaints are generally about agricultural practices far more intensive than grazing (e.g., crop dusting).

The Proposed Project provides buffers between planned residential areas and existing agricultural and proposed industrial reserve land uses. On the north side of Neighborhood A (Diamond Creek) this buffer would be accomplished by requiring that houses be setback 100 feet from the northern property line, which is consistent with the minimum Placer County buffer policy for residential adjacent to industrial uses and exceeds the minimum setback required between residential and agricultural land use. In addition, a block wall would be constructed at the northern boundary of the Diamond Creek property.

The west side of Neighborhood A (Diamond Creek) would be buffered from adjacent agricultural areas by a 50-foot rear yard setback in neighborhoods immediately abutting agricultural zoned lands. This 50 foot buffer incorporated in the Plan is consistent with the minimum buffer recommended between Agricultural and Residential uses in the Placer County General Plan. With the buffers incorporated into the project, impacts on adjacent agricultural operations would be less than significant.

|                            |                                                                                         |
|----------------------------|-----------------------------------------------------------------------------------------|
| <b>IMPACT 4.1-5(A):</b>    | <b>Incompatibility of proposed land uses with adjoining Sunset Community Plan area.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                   |
| <b>MITIGATION MEASURE:</b> | None required                                                                           |

Conflicts with the industrial land use proposed north of Phase I within Placer County's Sunset Industrial Area could occur should this Industrial Reserve area develop as industrial land.

The area north of the Diamond Creek property (Neighborhood A) is designated industrial reserve in the 1980 Sunset General Plan. Placer County recently published the *Draft Sunset Industrial Area Plan*, which provides land use designations and policies to guide development in approximately 8,900 acres immediately north of the Plan Area. Land uses under the draft plan would include business park, industrial, general commercial, agriculture, public facility, and open space. The area adjacent to the Diamond Creek property (Neighborhood A) would continue to be designated Industrial Reserve, which would permit agriculture, recreational and entertainment activities compatible with industrial uses, and solid waste disposal and processing activities, as permitted in the Farm Zone District.<sup>15</sup>

As discussed in Impact 4.1-4(A), Phase I includes a 100-foot buffer and a wall at the northern boundary of the Diamond Creek property (Neighborhood A) and residences. This buffer exceeds the 50 foot buffer between residential and agricultural uses called for in the Placer General Plan. The General Plan also states that buffers between residential and industrial uses should be 300 feet. The buffer can be reduced to a minimum of 100 feet when barriers, such as screening walls, berms and/or dense landscape are provided between the residential and industrial uses.

In addition, if industrial uses are developed within this area, they would need to comply with Placer County's buffer requirements. The impact of the Sunset Community Plan industrial development on the Plan Area would be determined during its specific plan approval process. The Placer County General Plan policies would sufficiently mitigate any incompatible land uses to a less-than-significant level.

The proposed Bill Graham Presents amphitheatre could generate noise loud enough to be heard in the Plan Area, creating a nuisance for Plan Area residence. The effects of the amphitheatre on noise levels in the Plan Area is discussed under Impact 4.11-4, in Section 4.11, Noise. As noted in the noise analysis, it is the responsibility of the County to mitigate the potential impacts of the amphitheatre.

Because the Proposed Project includes a 100-foot buffer between the Diamond Creek property and the Sunset Industrial Plan Area, this impact is considered less than significant.

**IMPACT 4.1-6(A):**

**Incompatibility of proposed land uses with the nearby existing and planned light industrial uses in the City of Roseville.**

SIGNIFICANCE:

Less than significant

MITIGATION MEASURE:

None required

The eastern boundary of Phase I is adjacent to the Hewlett-Packard Master Plan (HPMP), and undeveloped land designated for light industrial development. A portion of the Woodcreek North property that is adjacent to the Hewlett-Packard facility is buffered from future industrial development by a substantial open space corridor designated in the HPMP and the Woodcreek Oaks Boulevard extension (total ROW and landscape corridor of 140 feet) resulting in a buffer of approximately 400 feet. The Diamond Creek and Mourier 140 properties would also be



buffered from future light industrial development by the future Woodcreek Oaks Boulevard which, including landscape corridors and row, would be a minimum of 141 feet wide. Sound walls would provide an additional barrier between low- and medium-density residences and light industrial uses. Commercial and higher density residential land uses are located adjacent to the HPMP boundary on the northeast side of the Mourier 140 adjacent to commercial land on the HPMP site.

Hewlett-Packard and other light industrial land use adjacent to the Proposed Project is required to comply with the City of Roseville General Plan, Community Design Guidelines, and the North Area Design Guidelines which all specify that the appropriate use of berming, landscaping, and setbacks to complement adjacent uses, and screen noise and visual intrusions. These guidelines in combination with the separation between residential and light industrial uses provided by Woodcreek Oaks Boulevard and soundwalls, would ensure that placing residential uses in proximity to light industrial uses, including the HPMP, would be considered less than significant.

**IMPACT 4.1-7(A)**

SIGNIFICANCE:

MITIGATION MEASURE:

**Incompatibility between schools and surrounding uses.**

Less than significant

None required

Under Phase 1, two elementary schools and a junior high school would be constructed. The three school sites would be located in residential neighborhoods adjacent to parks or open space on sites that meet State of California standards for acreage. The sites meet District guidelines for safety considerations.<sup>16</sup> The school sites are not in proximity to airports or high-voltage power lines. The guidelines provide for setbacks from power lines greater than 100 kV. The closest power lines to the Plan Area would be 60kV lines, which would be at least 2,400 feet away from elementary school sites (well within the 250-foot setback recommended for 345 kv lines) and over 180 feet from the junior high school site in Neighborhood B (Mourier 140). As discussed in Section 4.8, Hazardous Materials and Public Safety, there are no known sources of contamination in the Plan Area, and the school sites would not be in adjacent to industrial or agricultural uses, so the risk of exposure to hazardous materials is low. The Plan Area is not near an earthquake fault or subject to soils or geological hazards that could not be mitigated through standard construction techniques (see Section 4.3, Soils, Geology and Seismicity). Adjacent roadways and entrances to the school sites would be designed in accord with City and State requirements. For these reasons, impacts related to the school sites are considered less than significant.

**IMPACT 4.1-8(A):**

SIGNIFICANCE:

MITIGATION MEASURE:

**Incompatibility between public/institutional and residential adjacent land uses.**

Less than significant

None required

Conflicts could occur between the adjacent uses within Phase I specific to the existing wastewater pumping station in the Diamond Creek property. The use of walls, berming, landscaping and setbacks should not only "complement" adjacent uses per the NRSP Design Guidelines, but

should also be designed to effectively screen noise or visual intrusions. With implementation of the NRSP design guidelines, this impact would be less than significant.

|                         |                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------|
| <b>IMPACT 4.1-9(A):</b> | <b>Incompatibility between County landfill operations and adjacent residential land uses.</b> |
| SIGNIFICANCE:           | Less than significant                                                                         |
| MITIGATION MEASURE:     | None required                                                                                 |

The closest proposed residential development in the Plan Area would be located beyond the one-mile buffer established around the Western Regional Sanitary Landfill. This distance is consistent with Placer County's policy to maintain a one-mile maintenance buffer around the landfill. Placer County expressed concern about the potential for complaints from future residents, even outside the one-mile buffer zone. Complaints about existing landfill operations typically are related to traffic, noise, debris, ground and surface water contamination, odors and aesthetics. However, in the last five years only two complaints have been received regarding the Western Regional Sanitary Landfill.<sup>17</sup> Both complaints were from a residential area, Stanford Ranch West, south of the landfill.

Because only two complaints have been received and the prevailing winds would not flow from the landfill to the Plan Area, the one-mile buffer is considered adequate to protect residents of the NRSP from the landfill.<sup>18</sup> Therefore, compliance with the one-mile buffer would reduce this impact to a less-than-significant level.

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>IMPACT 4.1-10(A):</b> | <b>Consistency with City General Plan.</b> |
| SIGNIFICANCE:            | Less than significant                      |
| MITIGATION MEASURE:      | None required                              |

General Plan policies are listed in Appendix C. As stated in the methodology section, Implementation of General Plan policies, as well as City Improvement Standards and Design Standards has been assumed in the analysis of NRSP impacts. In some cases (e.g., noise) the General Plan policies were used as the standard against which the significance of impacts were measured. Nonetheless, the General Plan policies were reviewed to determine whether the NRSP could be inconsistent with the direction of the General Plan or individual policies. No inconsistencies were identified.

## **FULL PROJECT IMPACTS**

|                         |                             |
|-------------------------|-----------------------------|
| <b>IMPACT 4.1-1(B):</b> | <b>Land use conversion.</b> |
| SIGNIFICANCE:           | Less than significant       |
| MITIGATION MEASURE:     | None required               |

The Full Project would convert approximately 1,390 acres of land designated for Light Industrial uses and Urban Reserve to a mixture of residential, commercial, business-professional, schools, parks and open space uses. For a discussion of land conversion in the Phase I area, please see Impact 4.1-1(A). Approximately 608 acres of Urban Reserve are located in the Phase II area. The



proposed land use designations would be compatible with planned land uses for land in Urban Reserve areas, and represent a logical extension of area development patterns. Therefore, this is considered a less-than-significant impact.

|                         |                                      |
|-------------------------|--------------------------------------|
| <b>IMPACT 4.1-2(B):</b> | <b>Agricultural land conversion.</b> |
| SIGNIFICANCE:           | Less than significant                |
| MITIGATION MEASURE:     | None required                        |

The Full Project would require converting existing undeveloped land to urban uses. The reader is referred to Impact 4.1-2(A) for a discussion of Phase I.

Under the Full Project, the entire Neighborhood D (Woodcreek West) and the central portion of Neighborhood C (Walaire 160) are designated by the CDC as being Farmland of Local Importance. The remaining area within Neighborhood C (Walaire 160) is classified as Grazing Land. Some seasonal grazing activities still take place within this portion of the Plan Area. Implementation of the Full Project would result in the loss of these lands, along with the land in Phase I, for grazing purposes. The conversion of grazing land (for cattle and sheep) and farmland of local importance is considered a less-than-significant impact, because of the relatively low value of the property for agricultural purposes as defined by the Farmland Mapping and Monitoring Program and the non-irrigated status of the farmland.

|                         |                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.1-3(B):</b> | <b>Incompatibility of proposed land uses with the adjoining DWSP, NWRSP, and Hewlett-Packard Master Plan.</b> |
| SIGNIFICANCE:           | Less than significant                                                                                         |
| MITIGATION MEASURE:     | None required                                                                                                 |

The Full Project has been designed to maintain consistency with the adjacent land use plans. As discussed under Impact 4.1-3(A), circulation interconnections appear complete; adjacent uses to Phase II are similar or complimentary; important open space corridors remain continuous; and design themes would not be expected to conflict. Further, the DWSP and NWRSP contain uses that are similar to the Proposed Project. Phase II would not be adjacent to the HPMP, so it would not be subject to any potential incompatibilities. Therefore, the impacts under the Full Project are considered less than significant.

|                         |                                                                                                           |
|-------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.1-4(B):</b> | <b>Incompatibility of proposed land uses with existing adjoining agricultural areas in Placer County.</b> |
| SIGNIFICANCE:           | Less than Significant                                                                                     |
| MITIGATION MEASURE:     | None required                                                                                             |

Under the Full Project, conflicts between the residential areas and nearby agricultural uses could occur. As discussed under Impact 4.1-4(A), agricultural landowners could express concern about urban encroachment upon their agricultural lands. However, the existing agricultural uses

(primarily grazing) are not expected to result in nuisance complaints. Further, the Applicant has proposed a 50-foot rear yard setback for all residences immediately abutting agricultural zoned lands. This setback is consistent with Placer County General Plan setbacks between residential and agricultural land for rangeland and pasture.

The northern portion of Phase II, Neighborhood C (Walaire 160), is adjacent to County lands designated for agricultural use. The majority of the agricultural activity is low-intensity seasonal grazing. The proximity of residential use would not be a conflict with the level of agricultural activity on these edges. A pistachio orchard exists immediately west of Neighborhood C (Walaire 160), but it would be adequately buffered by the oak woodlands that are to remain on the western edge of the proposed Fiddymment Park. In addition, the proposed expansion of Fiddymment/Blue Oaks Park would provide a minimum 400-foot buffer between agricultural uses and residential areas in the southern portion of Neighborhood C (Walaire 160), which exceeds the 50-foot buffer requirement of Placer County for residences. The northern portion of Neighborhood C would have a 50-foot buffer between residential and agricultural uses. In Neighborhood D (Woodcreek West), the four-lane road section and landscape corridor on the east side of Fiddymment Road would provide a 100-foot buffer. This would provide partial separation from agricultural uses. In addition, a masonry wall is proposed along Fiddymment Road which would provide additional relief from dust and noise. For these reasons, this impact would be considered less than significant.

|                            |                                                                                         |
|----------------------------|-----------------------------------------------------------------------------------------|
| <b>IMPACT 4.1-5(B):</b>    | <b>Incompatibility of proposed land uses with adjoining Sunset Community Plan area.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                   |
| <b>MITIGATION MEASURE:</b> | None required                                                                           |

Under the Full Project, only Neighborhood A (Diamond Creek) in Phase I would be adjacent to the Sunset Community Plan Area, which is planned for light industrial development. The NRSP provides 100 foot setbacks for residential uses adjacent to proposed industrial uses. As discussed under Impact 4.1-5(A), the use of buffers would mitigate any incompatibilities between proposed residential areas and light industrial uses to a less-than-significant level. Phase II would not be adjacent to the Sunset Community Plan.

|                            |                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.1-6(B)</b>     | <b>Incompatibility of proposed land use with nearby existing and planned light industrial uses in the City of Roseville.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                                                        |
| <b>MITIGATION MEASURE:</b> | None required                                                                                                                |

Phase II would not be adjacent to or near industrial uses. Please see Impact 4.1-6(A) for a discussion of Phase I compatibility with light industrial designations.



**IMPACT 4.1-7(B)****Incompatibility between schools and surrounding uses.**

SIGNIFICANCE:

Less than significant

MITIGATION MEASURE:

None required

Four school sites are proposed for the Full Project. Please see Impact 4.1-7(A) for discussion of school sites in Phase I. One elementary school site is proposed Neighborhood D (Woodcreek West). Surrounding land uses are similar to those discussed under Impact 4.1-7(A), with one exception. There are 230 kv lines running through the northern portion of the Woodcreek West property. These power lines are approximately 2,000 feet from the proposed school site. Like the school sites in Phase I, this location is consistent with guidelines for school siting. The electrical receiving station would be over 800 feet from the closest point of the school property. Because the proposed school sites would not be subject to safety problems due to siting, this is considered a less-than-significant impact.

**IMPACT 4.1-8(B)****Incompatibility between public/institutional and residential land uses.**

SIGNIFICANCE:

Less than significant

MITIGATION MEASURE:

None required

Conflicts could occur between adjacent uses within the Full Project. Please see Impact 4.1-8(A) for a discussion of public facilities conflicts in Phase I. An electrical receiving station is located adjacent to the western boundary of Neighborhood D (Woodcreek West). The receiving substation provides a 50-foot wide corridor along the east side of the station to provide a buffer for adjacent residential property lines. Along the south side of the station a 50-foot wide on-site landscaped corridor and residential street would buffer adjacent residential areas to the south. A minimum setback of 35-feet for residential property lines that abut the existing powerline corridor is included in the NRSP. In addition, the Specific Plan requires concrete masonry walls between residences and substations.

As discussed above under Impact 4.1-8(A), use of such buffers and walls would reduce potential incompatibilities to less-than-significant levels.

**IMPACT 4.1-9(B):****Incompatibility between County landfill operations and adjacent residential land uses.**

SIGNIFICANCE:

Less than significant

MITIGATION MEASURE:

None required

Implementation of the Full Project could affect existing landfill operations and future expansion west of Fiddymont Road due to concerns and complaints associated with the future residents of Phase I and Neighborhood C (Walaire 160) in Phase II. The Full Project places residential uses beyond the one mile boundary of the Western Regional Sanitary Landfill Southern. This distance is consistent with Placer County's request to maintain a one-mile maintenance buffer around the landfill. Because the closest residences would be located beyond the one-mile buffer, this impact is considered less than significant.

**IMPACT 4.1-10(B)****SIGNIFICANCE:****MITIGATION MEASURES:****Consistency with City General Plan.**

Less than significant

None required

As discussed under Impact 4.1-10(A), no inconsistencies between the NRSP and the City's General Plan were identified in this EIR analysis.

**IMPACT 4.1-11(B):****Annexation of 7.6 acres of Placer County land under agricultural uses to the City of Roseville for Fiddymment Road rights-of-way.****SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None required

Phase II of the Proposed Project would require the annexation of 7.6 acres of adjacent land in Placer County in order to provide sufficient rights-of-way for expansion and realignment of Fiddymment Road adjacent to Phase II. LAFCO evaluation criteria that generally address the issues associated with annexations include:

- contiguous annexation/incorporated area boundaries,
- clear requirements and identified funding for additional services,
- clear and definable annexation boundaries,
- minimize jurisdiction division along roadways, and
- general plan consistency.

Based upon application of the above criteria, the annexed area would be virtually enclosed in proposed rights-of-way (removal of a divided jurisdiction along a roadway). The NRSP annexation of Fiddymment Road would represent contiguous growth adjacent to the Del Webb and NWRSP areas. Fiddymment Road would provide a clear and definable western boundary for the NRSP. Lastly, the Fiddymment Road rights-of-way would not require additional infrastructure improvements to accommodate the annexation. Therefore, this impact is considered less than significant.

**4.1.5 MITIGATION MEASURES**

None required.



TABLE 4.1-1

## LAND USE RESIDUAL IMPACT SUMMARY TABLE

| Impact                                                                                                                                     | Phase I Impacts       | Full Project impacts  |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| 4.1-1(A and B) Land use conversion.                                                                                                        | Less than significant | Less than significant |
| 4.1-2(A and B) Agricultural land conversion.                                                                                               | Less than significant | Less than significant |
| 4.1-3(A and B) Incompatibility of proposed land uses with adjoining DWSP, NWRSP, and HPMP.                                                 | Less than significant | Less than significant |
| 4.1-4(A and B) Incompatibility of proposed land uses with adjoining agricultural areas in Placer County.                                   | Less than significant | Less than significant |
| 4.1-5(A and B) Incompatibility of proposed land uses with the adjoining Sunset Community Plan Area.                                        | Less than significant | Less than significant |
| 4.1-6(A and B) Incompatibility of proposed land uses with the nearby existing and planned light industrial uses in the City of Roseville.  | Less than significant | Less than significant |
| 4.1-7(A and B) Incompatibility between schools and surrounding uses.                                                                       | Less than significant | Less than significant |
| 4.1-8(A and B) Incompatibility between public/institutional and residential adjacent land uses.                                            | Less than significant | Less than significant |
| 4.1-9(A and B) Incompatibility between County landfill operations and adjacent residential land uses.                                      | Less than significant | Less than significant |
| 4.10(A and B) Consistency with City General Plan.                                                                                          | Less than significant | Less than significant |
| 4.1-11(B) Annexation of 7.6 acres of Placer County land under agricultural uses to the City of Roseville for Fiddyment Road rights-of-way. | Not applicable        | Less than significant |

## ENDNOTES

1. Draft West Roseville Baseline Studies, prepared by Dames and Moore for the City of Roseville, September 1994.
2. Draft West Roseville Baseline Studies, prepared by Dames and Moore for the City of Roseville, September 1994.
3. Placer County, *Draft Sunset Industrial Area Plan*, April 1997, page 1-32.
4. Placer County General Plan Update, Countywide General Plan Draft Policy Document, prepared by Crawford, Multari, and Starr for the County of Placer, October 1, 1993.
5. Placer County General Plan Update, Countywide General Plan Draft Policy Document, prepared by Crawford, Multari, and Starr for the County of Placer, October 1, 1993.
6. Draft West Roseville Baseline Studies, prepared by Dames & Moore for the City of Roseville, September 1994.
7. Draft West Roseville Baseline Studies, prepared by Dames & Moore for the City of Roseville, September 1994.
8. City of Roseville *General Plan 2010*, adopted November 18, 1992.
9. Draft West Roseville Baseline Studies, prepared by Dames & Moore for the City of Roseville, September 1994.
10. Draft West Roseville Baseline Studies, prepared by Dames & Moore for the City of Roseville, September 1994.
11. City of Roseville, *General Plan 2010*, 1992, p. II-24.
12. Placer County Important Farmland Map 1990, California Department of Conservation, Released March 1992.
13. City of Roseville, *General Plan 2010*, November 18, 1992.
14. Placer County General Plan Update Draft, General Plan Background Report Volume I, prepared by Crawford, Multari, and Starr et. al. for the County of Placer, September 25, 1992.
15. Placer County, *Draft Sunset Industrial Area Plan*, April 1997, page 1-32.
16. Guidelines for safety issues were provided by Deborah Bettencourt, Assistant Superintendent, Business Services, Roseville City School District, written communication, September 14, 1995.)

17. Dave Altman, Local Enforcement Agent, Placer County Department of Health and Human Services, Environmental Health Services, personal communication, March 5, 1997.
18. Will Dickinson, Supervisor, Solid Waste Division, Western Regional Landfill, personal communication, March 6, 1997.





---

---

## ***4.2 POPULATION, EMPLOYMENT AND HOUSING***

---

---



---

---

## ***4.2 POPULATION, EMPLOYMENT, AND HOUSING***

---

---

### **4.2.1 INTRODUCTION**

This section describes the anticipated changes in population, employment, and housing, including the jobs to housing balance and affordable housing, resulting from the implementation of the proposed NRSP.

Both Phase I and the Full Project (Phases I and II combined) are evaluated using the existing conditions as the baseline scenario.

### **4.2.2 ENVIRONMENTAL SETTING**

#### **Population**

##### **Regional Population**

Placer County is one of the four counties comprising the Sacramento Metropolitan Statistical Area (MSA). The other counties include El Dorado, Sacramento, and Yolo. Over the previous decade, this region was one of the most rapidly growing in the state. The population in the MSA grew 18 percent in ten years, from 1.2 million people in 1980 to 1.5 million people in 1990.

Placer County has been a rapidly growing component of the Sacramento MSA, as shown in Table 4.2-1. Between 1980 and 1990, Placer County grew from 117,247 to 172,796 people, an increase of 55,549 residents, or 47 percent. Placer County was the state's sixth most rapidly growing county during this period. From 1990 to 1996, County population increased 19.2 percent from 172,796 to 206,000. By the Year 2000, Placer County population is anticipated to reach 247,100, an overall increase of 110.8 percent for the period 1980 to 2000. During the decade, Placer County's share of the regional population total grew from 11 percent to 12 percent.

##### **City of Roseville Population**

From 1980 to 1990, the City of Roseville's population increased from 24,347 to 44,685, an addition of 20,388 persons or 84 percent. Roseville's share of Placer County's total population also grew, increasing from 21 to 27 percent. Much of Roseville's growth occurred during the latter part of the decade, as newcomers were attracted to the City's relatively affordable housing. Between 1990 and 1996, the City added another 15,015 residents, for a total population of 59,700. By the year 2000, the City of Roseville's population is expected to reach 77,850, an overall increase of 219.8 percent for the period 1980 to 2000.



**TABLE 4.2-1**  
**POPULATION GROWTH**  
**PLACER COUNTY AND ROSEVILLE (1980-2000)**

| Area                             | 1980 <sup>1</sup> | 1990 <sup>2</sup> | 1996 <sup>3</sup> | 2000 <sup>4</sup> | Years     | Growth | Percent Change |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|-----------|--------|----------------|
| Placer County                    | 117,247           | 172,796           | 206,000           | 247,100           | 1980-1990 | 55,549 | + 47.4%        |
|                                  |                   |                   |                   |                   | 1990-1996 | 33,204 | + 19.2%        |
|                                  |                   |                   |                   |                   | 1996-2000 | 41,100 | + 19.9%        |
| City of Roseville                | 24,347            | 44,685            | 59,700            | 77,850            | 1980-1990 | 20,338 | 84%            |
|                                  |                   |                   |                   |                   | 1990-1996 | 15,015 | 33.6%          |
|                                  |                   |                   |                   |                   | 1996-2000 | 18,150 | 26.5           |
| Roseville share of Placer County | 21%               | 26%               | 29%               | 31.5%             | 1980-1990 | 37%    |                |
|                                  |                   |                   |                   |                   | 1990-1996 | 45%    |                |
|                                  |                   |                   |                   |                   | 1996-2000 | 44%    |                |

<sup>1</sup> U.S. Census of Population, April 1, 1980.

<sup>2</sup> U.S. Census of Population, April 1, 1990.

<sup>3</sup> California Department of Finance estimates for January 1, 1996.

<sup>4</sup> Keyser Marson Associates, Inc, 1996.

SOURCE: City of Roseville, February 1996.

## Employment

### Regional Employment

The Sacramento MSA economy underwent a significant expansion during the 1980's as non-agricultural employment grew throughout the region. Services, retail trade, government, and wholesale trade all increased to meet the needs of the region's expanding population base. Placer County shared in the region's economic expansion with its own rapid growth. By 1990, Placer County employment represented ten percent of the regional total.

Placer County's economy is evolving from its traditional dependence on the railroad industry, the lumber and wood products industry, and agriculture. As noted by the State of California Employment Development Department, the County's substantial population growth has increased consumer demand and the number of jobs in retail, service, and construction. In 1990, Placer County had a total labor force of approximately 83,800, of which 6.8 percent were unemployed (see Table 4.2-2). Of this total, wage and salary employment numbered 62,900.

**TABLE 4.2-2**

**EMPLOYMENT  
PLACER COUNTY AND CITY OF ROSEVILLE, 1990 AND 1996**

| Location                                                                                                                                                                                                                                                        | Labor Force |         | Employed |        | Unemployment Rate |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------|----------|--------|-------------------|------|
|                                                                                                                                                                                                                                                                 | 1990        | 1996    | 1990     | 1996   | 1990              | 1996 |
| Placer County                                                                                                                                                                                                                                                   | 83,473      | 102,000 | 77,796   | 96,200 | 6.8               | 5.7  |
| City of Roseville                                                                                                                                                                                                                                               | --          | 26,860  | 22,000   | 25,250 | --                | 6.0  |
| City as Percent of County                                                                                                                                                                                                                                       | --          | 26.3    | 28.3     | 26.2   | --                | 27.8 |
| SOURCES: Placer County Planning Department, 1993; Recht Hausrath & Associates, 1992; California Department of Finance, 1996, Civilian Labor Force, Employment, and Unemployment; California Department of Finance, 1996, Labor Force Data for Sub-County Areas. |             |         |          |        |                   |      |

### City of Roseville Employment

The study area for employment is the City of Roseville. With approximately 22,000 jobs in the third quarter of 1990, Roseville had 28.3 percent of the Placer County's total employment. Approximately 40 percent of Roseville's employment was in the commercial sector, followed by 30 percent in the office sector, and 28 percent in the industrial sector. As of 1996, the City's work force numbered 26,860, of whom 6.0 percent were unemployed.<sup>1</sup>

Douglas Boulevard, the I-80 corridor, and the North Industrial Area are the City's major employment centers. With new development in portions of the North Industrial Area and

commercial/retail/office development in other specific plan areas, employment opportunities have become more widely distributed within Roseville.

### **Jobs/Housing Balance**

The jobs/housing balance refers to the location of residences in relation to the location of employment-generating uses. A well balanced ratio of jobs and housing is assumed to reduce the number of vehicle trips resulting from commuting, because employment opportunities and commercial services are near residential areas. This reduction in vehicle trips reduces motor vehicle travel; therefore, it improves air quality. To fully realize the benefits of a job/housing balance, the occupations and wages made available by the employment opportunities should correspond to the affordability and availability of nearby residences. As a result, jobs/housing balance must take into consideration both the number of units and their affordability.

The State Legislature has declared its intention to move toward the goal that every California worker have available the opportunity to reside close to his or her job site.<sup>2</sup> The City of Roseville has established its support for a jobs/housing balance through General Plan policy LE-1 which states that the City will:

Strive for a land use mix and pattern of development that provides linkages between jobs and employment uses, will provide a reasonable jobs/housing balance, and maintain the fiscal viability of the City.

The City of Roseville, Placer County, and City of Rocklin all adopted similar resolutions regarding the jobs/housing balance in 1983. Roseville's Resolution 83-118 states that a satisfactory jobs/housing balance, for the core industrial areas surrounding SR 65 and Washington Boulevard, is for 80 percent of the workers to reside within eight miles of their employment and for 60 percent to live within six miles.

In 1990, there were 17,789 dwelling units in the City of Roseville. Assuming a worker per household ratio of 1.35, approximately 25,516 workers could be housed within the City. Total 1990 employment was 22,000 in Roseville. Using the methods presented in Resolution 83-118, 80 percent of the employees would be 17,600. Therefore, the housing supply would be available for more than 80 percent of the workers and the current jobs/housing balance is considered numerically acceptable; however, due to the need to match housing costs, income levels and other housing choice factors, the relationship of housing affordability to housing supply is extremely complicated and difficult to accurately predict within single jurisdictions, or other sub-areas of the larger regional housing market.



## **Housing**

### **Housing Supply**

#### **Region and Placer County**

In 1990, the housing supply in Placer County was 77,879 dwelling units. This represents a 66 percent increase over the 1980 housing supply. Eighty-six percent of the units were single family residences. Construction of new homes in Placer County increased the number of dwelling units to 87,767 in 1994, an increase of 12.7 percent over four years. The proportion of single-family units declined slightly to 84.4 percent and multi-family units increased to 15.6 percent of the total housing stock. Table 4.2-3 shows the housing types as of 1996 and Table 4.2-4 illustrates the change in housing characteristics for the years 1990 and 1994.

**TABLE 4.2-3**

**HOUSING TYPES, PLACER COUNTY AND CITY OF ROSEVILLE  
YEAR 1996**

| <b>Location</b>     | <b>Single Family</b> | <b>Multiple Family</b> | <b>% Single Family</b> | <b>% Multiple Family</b> |
|---------------------|----------------------|------------------------|------------------------|--------------------------|
| Placer County       | 74,076               | 13,691                 | 84.4                   | 15.6                     |
| City of Roseville   | 18,380               | 5,119                  | 78                     | 22                       |
| City as % of County | 20.1                 | 46.6                   | N/A                    | N/A                      |

SOURCES: U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population and Housing; City of Roseville, 1996.

**TABLE 4.2-4**

**HOUSING CHARACTERISTICS, PLACER COUNTY AND CITY OF ROSEVILLE  
YEARS 1990 THROUGH 1996**

| <b>Location</b>     | <b>Total Units, 1990</b> | <b>Total Units, 1996</b> | <b>% Change, 1990-96</b> | <b>Median Value, 1990</b> | <b>Median Value, 1996</b> | <b>% Change 1990-96</b> | <b>Vacancy Rate, 1990</b> | <b>Vacancy Rate, 1996</b> |
|---------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|-------------------------|---------------------------|---------------------------|
| Placer County       | 77,879                   | 87,770                   | 12.7                     | \$168,500                 | \$169,000                 | 0.3                     | 17.7                      | 16.3                      |
| City of Roseville   | 17,789                   | 25,257                   | 42                       | \$158,000                 | \$167,300                 | 5.9                     | 6.7                       | N/A                       |
| City as % of County | 22.8                     | 24.2                     | N/A                      | 93.8                      | 99.0                      | N/A                     | N/A                       | N/A                       |

SOURCES: U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population and Housing; City of Roseville, 1996.



In 1990, the housing vacancy rate in all of Placer County was 17.7 percent, which declined to 16.3 percent in 1994, reflecting the large number of vacation homes in the Lake Tahoe area. Unincorporated areas in the county have a particularly high vacancy rate of 27.14 percent, in contrast to the average vacancy rate for incorporated areas of 4.49 percent.

### City of Roseville

In 1994, there were 21,269 dwelling units in the City of Roseville. By 1996, the number of dwelling units increased to 25,257 units, an increase of almost 18.8 percent over two years. The General Plan land use allocation provides for a total of 39,200 dwelling units. This includes approximately 1,000 units that are not allocated to specific geographic locations, and that have been specifically reserved for use by the City in certain housing programs, such as density bonuses and other development incentives. Based on City growth projections, it is expected that the current residential land use allocation will be exhausted by the year 2005.

As of January 1996, occupancy permits had been granted for 25,257 units. This is more than double the 10,267 units estimated in 1980 by the U.S. Census. In 1996 a total of 1,541 occupancy permits had been granted. The average household size was determined by the 1990 census to be 2.54 persons per household.

Almost three quarters of the dwelling units in the City are single-family residential homes (18,380 units). However, multi-family residential construction has increased substantially. Multi-family units have risen from 13 percent of the available housing stock in 1980 to 20 percent of the total housing stock (5,119 units). The pace of construction has slowed in the last two years. Table 4.2-5 describes the types of dwelling units existing in the City of Roseville in 1996.

| <b>TABLE 4.2-5</b>                                   |                        |                            |
|------------------------------------------------------|------------------------|----------------------------|
| <b>CITY OF ROSEVILLE</b>                             |                        |                            |
| <b>OCCUPANCY PERMITS ISSUED (As of January 1996)</b> |                        |                            |
| <b>Residential Type</b>                              | <b>Number of Units</b> | <b>Percentage of Total</b> |
| Single Family                                        | 18,380                 | 73                         |
| Multi-Family                                         | 5,119                  | 20                         |
| Other (mobile homes,<br>group quarters, etc.)        | 1,758                  | 7                          |
| <b>TOTAL</b>                                         | <b>25,257</b>          | <b>100.0</b>               |
| SOURCE: City of Roseville, February 1996.            |                        |                            |

## Housing Affordability

Housing affordability refers to the relationship between total household income and total household expenditures for housing, including mortgage, taxes, insurance and utilities. This relationship is typically expressed as the percentage of total household income allocated to housing expenditures. The Department of Housing and Urban Development uses the following definitions to describe household affordability by income group:

|                 |                              |
|-----------------|------------------------------|
| Very Low Income | Below 50% of Median Income   |
| Low Income      | 50% to 80% of Median Income  |
| Moderate Income | 80% to 120% of Median Income |
| Above Moderate  | Over 120% of Median Income   |

In 1994, the median housing price for existing single-family homes in Roseville was \$167,300. This is an increase from \$158,000 in 1990. Despite the recession in California, the median resale price of housing in Roseville increased nearly 24 percent during the early 1990s.

In order to address the need for affordable housing, a Regional Housing Needs Allocation Plan (RH NAP) was developed by the Sacramento Area Council of Governments (SACOG). This plan allocates a fair share of housing needs to each local jurisdiction for a five-year period. The current allocated is for the period 1990 through 1995.

SACOG has allocated the Regional Fair Share Housing Needs for the City of Roseville. Table 4.2-6 indicates the division of the allocation by income group. Roseville's share indicates the need to provide a total of 7,038 affordable housing units from 1990 through 1995. These units are further divided into 1,734 units for very low-income, 1,190 for low income, 735 for middle income, 736 for moderate income, and 2,643 for above moderate income households.

| TABLE 4.2-6                               |                         |              |                          |
|-------------------------------------------|-------------------------|--------------|--------------------------|
| CITY OF ROSEVILLE                         |                         |              |                          |
| REGIONAL FAIR SHARE OF AFFORDABLE HOUSING |                         |              |                          |
| Income Group                              | Definition              | Percentage   | Number of Dwelling Units |
| Very Low                                  | Less than 50% of Median | 25.1         | 1,734                    |
| Low                                       | 50% to 80% of Median    | 16.8         | 1,190                    |
| Middle                                    | 80% to 100% of Median   | 10.8         | 735                      |
| Moderate                                  | 100% to 120% of Median  | 10.8         | 736                      |
| Above Moderate                            | 120+% of Median         | 36.5         | 2,643                    |
| <b>TOTAL</b>                              |                         | <b>100.0</b> | <b>7,038</b>             |
| SOURCE: City of Roseville, February 1995. |                         |              |                          |

Similar to most jurisdictions in California, Roseville has encountered challenges in meeting past affordable housing objectives. The General Plan Housing Element has established goals and policies designed to encourage the construction of affordable housing. These include working with the development and business communities to provide affordable rental opportunities, requiring ten percent of new housing units to be affordable, and continuing to participated in state and federal programs.<sup>3</sup> However, the Housing Element concludes:

Unless the funding for existing federal, state, and local programs is expanded significantly and new programs are established, the City will be unable to meet its total affordable housing needs.

The City's ten percent affordable housing goal for new units is anticipated to be an achievable goal, but it is recognized that it may not meet the projected affordable housing need allocation. A higher goal was considered to be infeasible by the City. However, it was believed to be preferable to set a realistic goal rather than one that cannot be met.

The intent of the ten percent affordable housing goal is to provide a mechanism whereby the City property owners and the business community can actively work together in developing affordable housing for very low, and middle income households. The City's affordable housing goal is not intended to be used as an inclusionary zoning program, whereby the property owners would be required to shoulder the entire responsibility of producing the affordable housing.

In the past, the ten percent affordable housing goal has been calculated for each specific plan area based on the total residential units allocated to each area. This practice will continue with any future specific plan area or areas receiving new residential land use entitlement. Each plan will include a strategy identifying how it can best meet the ten percent goal and which specific parcels are best suited for development of affordable housing.

The City and property owner are responsible for assembling the necessary subsidy packages for affordable housing, and for working in a good faith effort to produce affordable units within the residential projects. The ten percent affordable housing goal is intended to be flexible in recognition that the actual number of affordable units constructed depends on the level of government funding. As the City applies its affordable housing goal to new residential construction, the percentage and number of affordable units produced may be less than the maximum ten percent goal, depending on subsidies which can be assembled at any given point in time.

### **4.2.3 REGULATORY SETTING**

There are no federal regulations that would be considered relevant to the Proposed Project. The California State Legislature has declared its intention to support enabling California workers the opportunity to live close to his or her job site (Government Code § 65890.1.h).

The City of Roseville General Plan includes the a number of policies intended to ensure that there is adequate stock of housing for a variety of employment opportunities. Please see Appendix C for the applicable policies.



#### 4.2.4 IMPACTS

In order to provide a more conservative analysis, the following discussion uses existing conditions as the condition to which the Proposed Project is added. In addition, this EIR assumes the implementation of the City's General Plan policies and improvement standards in the impact analysis.

CEQA directs that social and economic effects be considered in an EIR only to the extent that they would result in secondary or indirect adverse impacts on the physical environment. Section 15382 of the CEQA Guidelines defines "significant effect on the environment" as follows:

"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant. [emphasis added]

The direction for treatment of economic and social effects is reiterated in Section 15131(a) of the CEQA Guidelines:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

Therefore, anticipated changes in population, employment, and housing attributable to buildout of the NRSP will be considered for secondary physical environmental impacts in other sections of this EIR (e.g., traffic and circulation; air quality, noise).

New employment in a community creates population expansion by adding new employees and their families. This addition to the existing population can affect the environment through increased demand for housing and public services, and through increased use of the transportation network and associated effects on air quality and noise. These specific issues are discussed in depth in separate sections of this EIR. The following discussion describes the amount of new employment (direct and indirect), population, and housing that could be generated by the Proposed Project, and the effect on the City's jobs/housing balance. These increases are measured against existing conditions, rather than 2010 projections.

#### Method of Analysis

##### **Population**

The increased resident population resulting from the development of the Proposed Project is estimated by multiplying the total number of residential units by the average number of residents



per dwelling unit. For this analysis, the average number of residents per housing unit is assumed to be 2.54. For the Eskaton residential use the number of residents per unit is assumed to be 1.5.

## **Housing**

The number of residential units identified in the Specific Plan is presented and considered the direct increase in housing supply available to the City of Roseville. The analysis compares citywide housing supply under the proposed NRSP with the supply under the existing General Plan.

## **Employment**

The additional jobs that could result from the development of the proposed NRSP are calculated based upon the types of commercial development and the estimated amount of floor area of each commercial development. The assumed floor to area ratio (FAR) is 0.30 for office and 0.20 for commercial and retail development (see Table 4.2-7). A standard ratio of employees per floor area is also used and is applied to the FAR to determine the future level of employment in the Plan Area.

## **Standards of Significance**

Implementation of the proposed NRSP would result in a significant impact if:

- An imbalance in the city jobs to housing ratio is exacerbated;
- The level of affordable housing provided by the proposed NRSP is not consistent with adopted City policies; or
- If the Proposed Project substantially exceeds official population projections stated in the General Plan.

## **PHASE I IMPACTS**

|                            |                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------|
| <b>IMPACT 4.2-1(A):</b>    | <b>Increased population within the City of Roseville during project construction.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                 |
| <b>MITIGATION MEASURE:</b> | None required                                                                         |

Phase I would require temporary construction workers over the duration of project construction. The majority of the construction work force would be drawn from the Roseville, Placer County, and greater Sacramento Metropolitan Statistical Area (MSA). For this reason, increases in population related to project construction are expected to be minor, and impacts are considered less than significant.

**TABLE 4.2-7****NORTH ROSEVILLE SPECIFIC PLAN  
EMPLOYMENT GENERATION<sup>1</sup>**

| <b>Land Use Type</b>                                                                                                                                                            | <b>Acres</b> | <b>Floor to<br/>Area Ratio<br/>(sq. ft./acre)</b> | <b>Total<br/>Building<br/>Area (sq. ft.)</b> | <b>Employment<br/>Density (per<br/>1,000 sq. ft.)</b> | <b>Employees<br/>by Land<br/>Use</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------|----------------------------------------------|-------------------------------------------------------|--------------------------------------|
| Commercial                                                                                                                                                                      |              |                                                   |                                              |                                                       |                                      |
| Phase I                                                                                                                                                                         | 37.7         | 1.75:5 (20%)                                      | 328,442                                      | 3                                                     | 985                                  |
| Phase II                                                                                                                                                                        | 6.9          |                                                   | 60,113                                       |                                                       | 180                                  |
| Business Professional                                                                                                                                                           |              |                                                   |                                              |                                                       |                                      |
| Phase I                                                                                                                                                                         | 4.4          | 1.75:5 (30%)                                      | 57,500                                       | 4                                                     | 230                                  |
| Phase II                                                                                                                                                                        | 0.0          |                                                   |                                              |                                                       |                                      |
| Phase I Total                                                                                                                                                                   | 42.1         |                                                   |                                              |                                                       | 1,215                                |
| Phase II Total                                                                                                                                                                  | 6.9          |                                                   |                                              |                                                       | 180                                  |
| <b>FULL PROJECT<br/>TOTAL<br/>EMPLOYMENT</b>                                                                                                                                    |              |                                                   |                                              |                                                       | <b>1,395</b>                         |
| NOTES:<br>1. Employment estimates contained in this table represent maximum employment at buildout of the land uses within the Plan Area.<br><br>SOURCE: NRSP, 1996; EIP, 1996. |              |                                                   |                                              |                                                       |                                      |

**FULL PROJECT IMPACTS**

|                            |                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------|
| <b>IMPACT 4.2-1(B):</b>    | <b>Increased population within the City of Roseville during project construction.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                 |
| <b>MITIGATION MEASURE:</b> | None required                                                                         |

The Full Project would require temporary construction workers throughout the construction period for both Phase I and Phase II. The majority of the construction work force would be drawn from the Roseville, Placer County, and greater Sacramento MSA. For this reason, increases in population related to project construction are expected to be minor, and impacts are considered less than significant.

|                            |                                                                                                      |
|----------------------------|------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.2-2(B):</b>    | <b>Increased population within the City of Roseville after construction of the Proposed Project.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                                |
| <b>MITIGATION MEASURE:</b> | None required                                                                                        |

Development of the Full Project would increase the City's population by approximately 12,533 residents, which could contribute to adverse environmental effects such as increased traffic, degradation of air quality, and additional demand for public services. These issues are described elsewhere in this Draft EIR. As defined by CEQA, a population increase, in and of itself, does not constitute a significant environmental impact.

Phase II would convert land currently planned for Urban Reserve to mixed use. As mentioned under Impact 4.1-1(A), this would add to the supply of housing in the City, thereby increasing the City's population.

As shown in Table 4.2-8, Phase II of the Full Project includes 2,575 single and multi family residential units, for a Full Project total of 5,098 new residential units. Assuming an average of 2.54 residents per household, the single and multi-family residential units in Phase II would result in an additional 6,541 residents for a Full Project total population of 12,533.

As noted above, CEQA does not identify a population increase as a significant environmental impact. Impacts that are directly attributable to population growth, including traffic, air quality, and public service impacts are separately identified and described in other sections of this Draft EIR. Therefore, the population increase resulting from implementation of the Full Project is considered less than significant.

**TABLE 4.2-8**

**PHASE I AND II NORTH ROSEVILLE SPECIFIC PLAN  
PROPOSED RESIDENTIAL LAND USE AND POPULATION**

| Residential Density Designation                | Proposed Acreage |              |              | Proposed Units |              |              | Population   |              |               |
|------------------------------------------------|------------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|---------------|
|                                                | Phase I          | Phase II     | Full Project | Phase I        | Phase II     | Full Project | Phase I      | Phase II     | Full Project  |
| Low-density                                    | 375.5            | 392.4        | 767.9        | 1,689          | 1,835        | 3,524        | 4,290        | 4,661        | 8,951         |
| Medium-density                                 | 18.9             | 36.3         | 55.2         | 159            | 294          | 453          | 404          | 747          | 1,151         |
| High-density                                   | 14.8             | 22.5         | 37.3         | 275            | 446          | 721          | 699          | 1,133        | 1,831         |
| Age-restricted housing<br>(Independent Living) | 50.8             | 0            | 50.8         | 400            | 0            | 400          | 600          | 0            | 600           |
| <b>TOTAL</b>                                   | <b>460.0</b>     | <b>451.2</b> | <b>911.2</b> | <b>2,523</b>   | <b>2,575</b> | <b>5,098</b> | <b>5,992</b> | <b>6,541</b> | <b>12,533</b> |

SOURCE: NRSP, 1996.



|                            |                                             |
|----------------------------|---------------------------------------------|
| <b>IMPACT 4.2-3(B):</b>    | <b>Changes in the jobs/housing balance.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                       |
| <b>MITIGATION MEASURE:</b> | None required                               |

The Full Project includes 49 acres of commercial and office land uses, including 6.9 acres of commercial acreage in Phase II. The development of these uses is anticipated to increase the employment within the Plan Area. As shown in Table 4.2-7, development of the Full Project would result in 1,395 employees. However, the buildout of the Plan Area would result in a decrease in the employment projected for the buildout of the City of Roseville General Plan, because light industrial land in Phase I would be converted to other uses (e.g., residential, commercial, schools, parks, open space). As such, the total projected employment for the Plan Area is expected to decrease from the current projected level. It should be noted that it has been a policy of the City of Roseville, since 1977, to look for opportunities to improve the long-term jobs/housing ratio in the community by, among other things, rezoning land from light industrial to residential. In that sense, the decrease in overall employment potential in the Plan Area due to the Proposed Project is consistent with any standing City of Roseville policy.

The Full Project is anticipated to add approximately 1,395 new jobs to the City of Roseville (see Table 4.2-7). Assuming an average of 1.34 workers per household<sup>6</sup>, these new employees would require approximately 1,041 residential units. Using the assumptions in Resolution 83-118, should have approximately 625 residential units within six miles of the Plan Area and 833 residential units within eight miles of the Plan Area. The Full Project includes 5,098 new units including 2,575 new residential units in Phase II, five times the amount needed to provide housing to the employees of the Plan Area. Therefore, with the construction of the residential development identified in the NRSP, the jobs/housing balance is expected to be consistent with the City's requirements. It should be noted that a "balanced" mix of jobs and housing does not assure dwelling units developed under the NRSP would either be affordable or available to those whose jobs are a result of the NRSP.

|                            |                                                                      |
|----------------------------|----------------------------------------------------------------------|
| <b>IMPACT 4.2-4(B):</b>    | <b>Ability to meet City of Roseville's affordable housing goals.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                |
| <b>MITIGATION MEASURE:</b> | None required                                                        |

As discussed above, the NRSP would meet the Roseville General Plan requirements for the provision of affordable housing to low- and middle-income households. The NRSP would make 188 dwelling units, or approximately 3.7 percent of the total number of residential units, available for purchase by low income households. Additionally, the Specific Plan would make 195 dwelling units, or 3.8 percent of the total number of residential units, available as rental housing for low income households. To meet the median income affordable housing requirements, the Specific Plan would make 127 dwelling units, or 2.5 percent of all housing, available for purchase for middle income households. The total number of affordable units would be 510, or ten percent of the total number of dwelling units.

#### 4.2.5 MITIGATION MEASURES

None required.

**TABLE 4.2-9****POPULATION, EMPLOYMENT, AND HOUSING RESIDUAL IMPACT  
SUMMARY TABLE**

| <b>Impact</b>                                                                                                | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
|--------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|
| 4.2-1(A and B) Increased population within the City of Roseville during project construction.                | Less than significant  | Less than significant       |
| 4.2-2(A and B) Increased population within the City of Roseville after construction of the proposed project. | Less than significant  | Less than significant       |
| 4.2-3(A and B) Changes in the jobs/housing balance.                                                          | Less than significant  | Less than significant       |
| 4.2-4(A and B) Ability to meet the City of Roseville's affordable housing goal.                              | Less than significant  | Less than significant       |

## ENDNOTES

1. City of Roseville, *Highland Reserve North, Draft EIR*, p. 3.2-3, December 1996.
2. State of California, Government Code 65890.1.h.
3. City of Roseville General Plan, Housing Affordable Goal; Affordable Housing Policy HB-3.
4. City of Roseville Comprehensive Land Use Element, p. 4.2-11, February 1995.
5. North Roseville Specific Plan, Administrative Draft, Page 3-1, November 1996.
6. City of Roseville Comprehensive Land Use Element, p. 4.2-11, February 1995.

---

---

### ***4.3 SOILS, GEOLOGY AND SEISMICITY***

---

---





---

---

## ***4.3 SOILS, GEOLOGY AND SEISMICITY***

---

---

### **4.3.1 INTRODUCTION**

This section addresses potential effects related to on-site soils and geologic and seismic conditions in the NRSP area. Plan Area characteristics such as topography, regional and local geology, seismicity, mineral resources and soil types are described. This information is based on information summarized from the U.S. Soil Conservation Service West Placer County Soil Survey, the West Roseville Baseline Study, geologic and mineral resource reports by the California Division of Mines and Geology, and existing reports on geologic conditions in the area.

Both Phase I and Full Project (Phases I and II combined) are evaluated using the site's existing conditions as the baseline against which impacts are evaluated. The existing conditions are used as the baseline since impacts at Year 2010 would not be different or more severe than analysis using the existing condition.

### **4.3.2 ENVIRONMENTAL SETTING**

#### **Topography**

The Plan Area is located within the Central Valley, in the north and west portion of the City of Roseville. The dominant features of the Plan Area are Pleasant Grove Creek and the South Branch of Pleasant Grove Creek which traverse and drain the area in an easterly to westerly direction. The site is characterized by gently rolling and undulating terrain with some steep cut banks located along the creek channels. In some areas, these cut banks result in the creek bed lying ten to fifteen feet below the surrounding topography. The Plan Area gently slopes to the west with topographically flatter land located along the western border. Elevations range from 80 feet above mean sea level (msl) along the western parcel boundaries of the Plan Area to 155 feet msl along the eastern boundaries of the Plan Area.

#### **Regional Geology**

The Central Valley is composed of alluvial deposits from the adjoining Sierra Nevada. The geology in the vicinity of the Plan Area consists of transitional formations between the alluvial deposits of the Valley and granitic material characteristic of the Sierra Nevada range. The Roseville area is principally underlain by relatively recent Plio-Pleistocene non-marine sedimentary deposits formed during the Cenozoic period. These sedimentary deposits include older Sacramento Valley alluvium (Laguna and Valley Springs formations). The Sacramento Valley alluvium typically consists of very firm layers of sand, silt, and gravel, which do not

contain very weak or highly compressible soil layers. The United States Geological Survey (USGS), (*Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierra Foothills, California*) identifies three dominant formations in the Plan Area; the Turlock Lake Formation, the Riverbank Formation and Quaternary Alluvium. Development constraints created by geologic formations typically relate to underlying stability and water bearing capability.

### **Local Geology**

The geologic units located on the Plan Area parcels are illustrated in Figure 4.3-1 and include the following.

#### **Turlock Lake Formation**

The Turlock Lake formation, the predominant geologic unit in the Plan Area, is generally characterized by partially consolidated gravel, sand, and silt. The surface soil typically contains zones of cemented sand and silt (hardpan). This formation consists of eroded alluvial fans derived primarily from plutonic rocks (igneous rocks formed at great depth) of the Sierra Nevada. A principal constraint associated with the Turlock formation is the relative impermeability and limited water holding capability of the material.<sup>1</sup>

#### **Quaternary Alluvium**

This geologic unit is comprised of deposits of cobbles, gravel, silt, sand and clay. The unconsolidated terrace deposits and recent stream deposits are found along the creek channels within the Plan Area. Soils originating from alluvial deposits are typically well drained, and vary in depth to an impervious layer of clay hardpan.<sup>2</sup>

#### **Riverbank Formation**

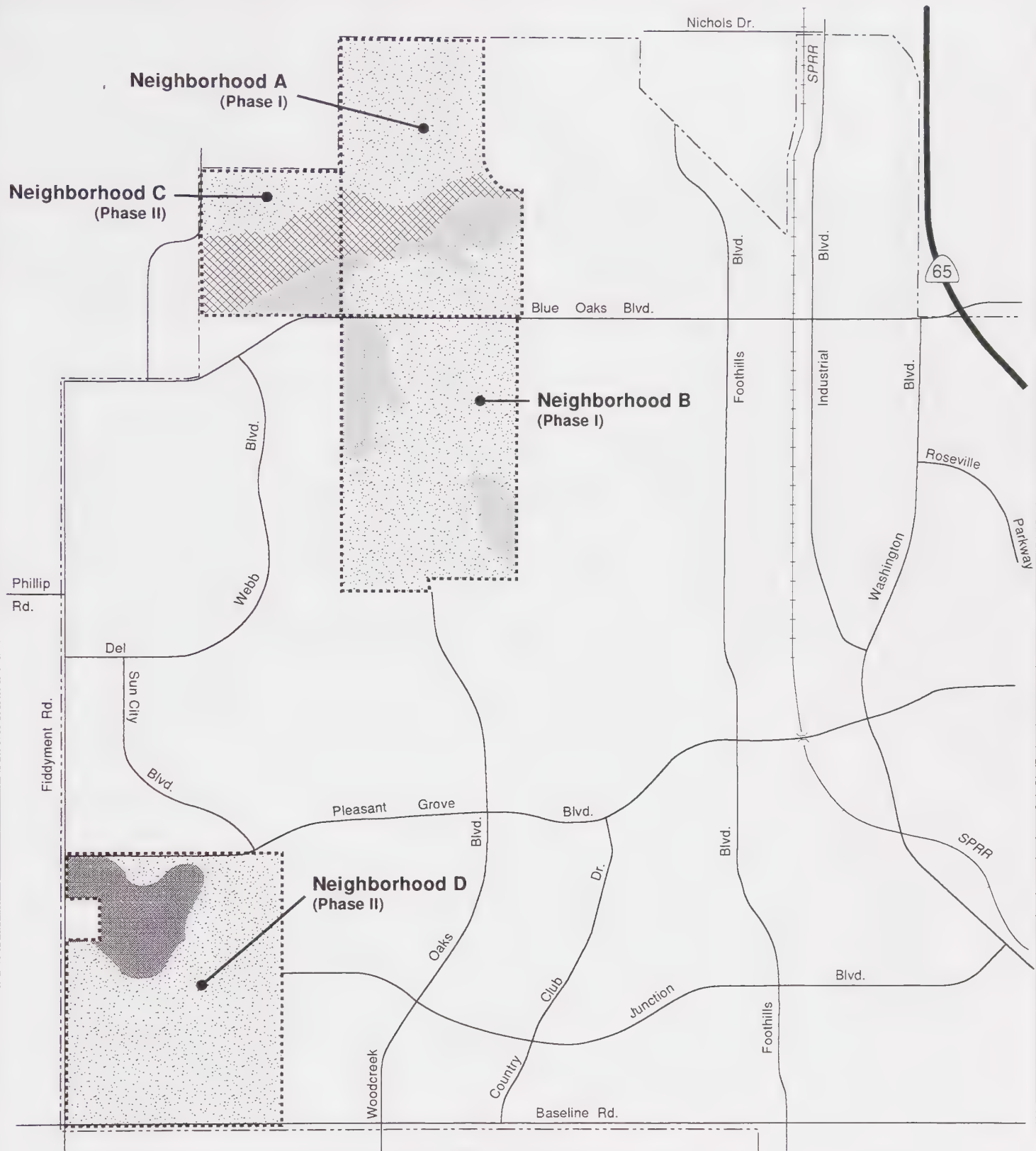
This geologic unit consists of weathered reddish gravel, sand and silt formed from mafic (primarily dark mineral) igneous rock fragments. This unit forms clearly recognizable alluvial terraces and fans. The alluvial component of this unit was likely derived from the Sierra Nevada and was deposited by the ancestral American and other rivers.<sup>3</sup>

In addition to the geologic units mentioned above, the Woodcreek South site also contains the geologic unit Riverbank Formation (Lower Member).

### **Geologic Constraints**

#### **Slope Instability**

Landslides and slope stability are not known to be a problem in the vicinity of the Plan Area. However, there are some steep, incised channels along Pleasant Grove Creek and the South Branch of the Pleasant Grove Creek. Undercutting of these slopes by the creek channel could cause slope instability.



- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads

- Turlock Lake Formation (Pleistocene)
- Alluvium (Holocene)
- Riverbank Formation (Pleistocene) Upper Member
- Riverbank Formation (Pleistocene) Lower Member

**Figure 4.3-1**

**Geologic Units**

SOURCE: City of Roseville, *City of Roseville West Roseville Baseline Studies*, September 1992; EIP Associates, May 1997.

0 1/4 1/2  
Scale In Miles



96063  
Base







## **Mineral Resources**

The California Department of Mines and Geology (CDMG) is responsible under the California Surface Mining and Reclamation Act of 1975 (SMARA) for the classification and designation of areas that contain (or could contain) significant mineral resources. The purpose of the identification of these areas is to provide a context for land use decisions by local governments in which mineral resource availability is one of the pertinent factors being balanced along with other considerations. The CDMG has not performed a detailed evaluation of the Plan Area.

Aggregate resources are classified as one of several different mineral resource zone categories (MRZ-1, MRZ-2, MRZ-3, MRZ-3(a), and MRZ-4). These classifications are generally based upon the relative knowledge about the resource's presence and the quality of the material. Of the five classifications listed, only MRZ-1, MRZ-3, and MRZ-4 occur within the Plan Area, both in Phase I and Phase II (Figure 4.3-2). MRZ-1 zones are areas where adequate information indicates that no significant mineral deposits are present, or where judged that little likelihood exists for their presence. MRZ-3 designated areas contain aggregate deposits, the significance of which, according to the CDMG, cannot be evaluated from existing data. Under Section 2762(d) of SMARA, a lead agency may require that an evaluation of an area classified as MRZ-3 be prepared to ascertain the significance of the mineral deposit located therein. MRZ-4 designated areas occur where available information is inadequate for assignment to any other MRZ zone.

No mineral extraction operations exist in the Plan Area.

## **Seismicity**

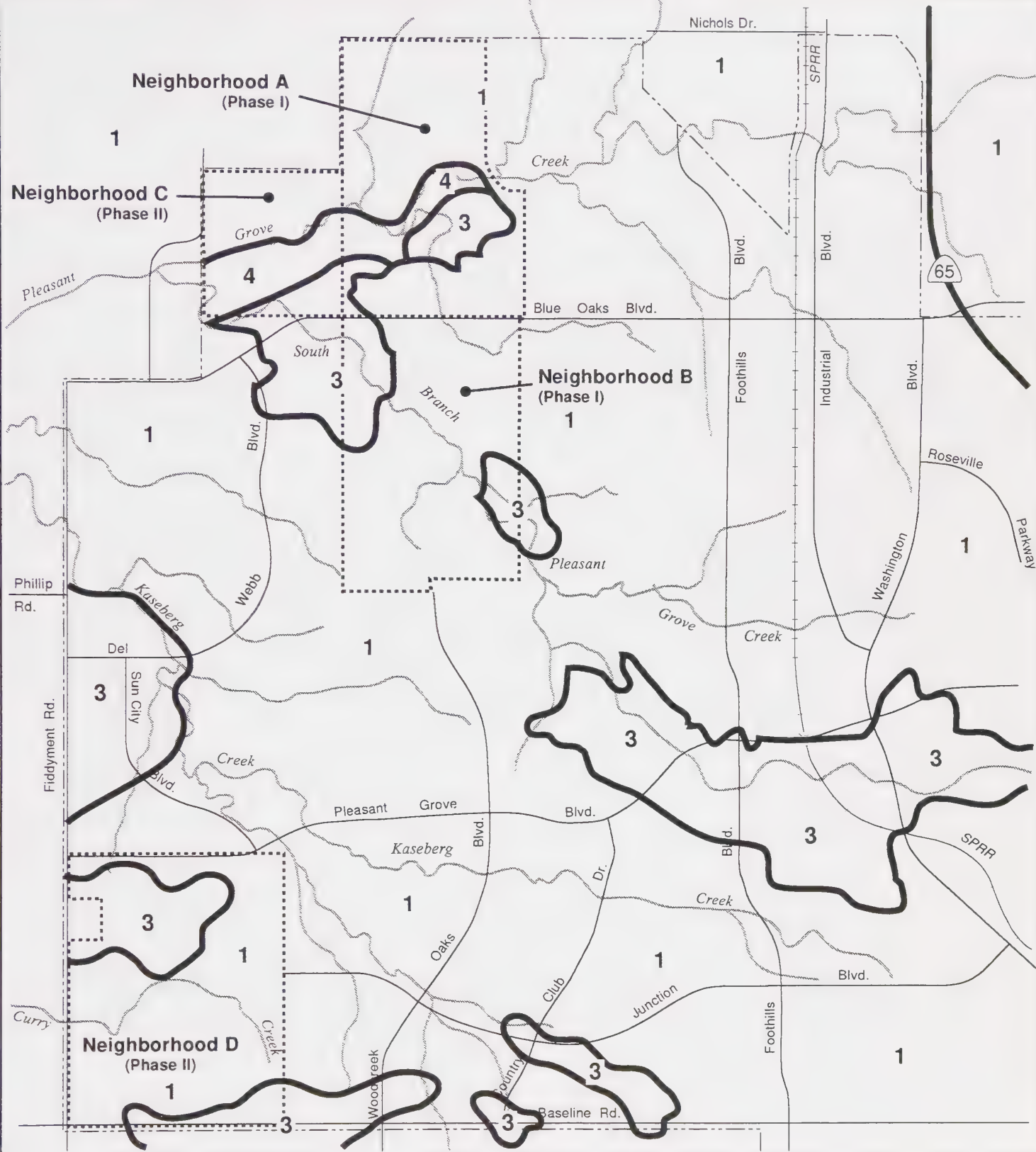
### **Regional Faults**

There are a number of mapped faults within 100 kilometers of the Plan Area. The Plan Area is located between the seismically active Coast Ranges and the historically seismic Foothill fault zone in the Sierra Nevada. Regional faults to the west include the Hayward and Calaveras Faults, and to the east, the Bear Mountain and Melones Faults in the Foothill fault zone. These faults are identified in Table 4.3-1 and Figure 4.3-3. Other nearby faults shown on Figure 4.3-4, including the Willows Fault and Stockton Fault, are considered to be inactive faults with displacements occurring greater than two million years before the present. Currently, studies are being performed to identify the potential for significant seismic activity occurring on blind thrust faults located within the eastern edge of the Coast Ranges.

### **Local Faults**

Although numerous faults have been identified within 100 kilometers of the Sacramento area, no active faults are known to exist within Placer County and the Plan Area is not located within an Alquist-Priolo Special Studies Zone. Placer County is classified as a low-severity earthquake zone.<sup>4</sup> The probable maximum expected earthquake intensity that can be anticipated in this zone would be VI or VII on the modified Mercalli Scale and a 5.0-5.9 in magnitude on the Richter Scale.<sup>5</sup> The last geologic activity recorded in the area with an intensity of 4 or greater measured





SOURCE: City of Roseville, February 1995;  
EIP Associates, May 1997.

**1 = MRZ-1** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

**3 = MRZ-3** Areas containing mineral deposits the significance of which cannot be evaluated from available data.

**4 = MRZ-4** Areas where available information is inadequate for assignment to any other MRZ zone.

**Figure 4.3-2**

## Mineral Resource Zones

0 1/4 1/2  
Scale In Miles



96063  
Base

**eip**





**TABLE 4.3-1a****ACTIVE FAULTS ZONED BY THE CALIFORNIA DIVISION OF MINES AND GEOLOGY WITHIN 100 KILOMETERS OF THE PROJECT SITE**

| <b>Fault Name</b>     | <b>Distance to Site (kilometers)</b> | <b>Maximum Credible Earthquake Magnitude (MCE)<sup>1</sup></b> |
|-----------------------|--------------------------------------|----------------------------------------------------------------|
| Cleveland Hills Fault | 66                                   | 6.5                                                            |
| Green Valley Fault    | 98                                   | 6.5                                                            |
| Antioch Fault         | 98                                   | 6.5                                                            |
| Hunting Creek Fault   | 91                                   | 6.0 - 6.5                                                      |

**TABLE 4.3-1b****OTHER FAULTS NOT ZONE ACTIVE IN THE VICINITY OF THE PROJECT SITE**

|                          |    |           |
|--------------------------|----|-----------|
| Dunnigan Hills Fault     | 47 | 6.5       |
| Spenceville Fault        | 35 | 6.0 - 6.5 |
| Swain Ravine Fault       | 66 | 6.0 - 6.5 |
| Bear Mountain Fault Zone | 33 | 6.5       |
| Dewitt Fault             | 30 | 6.0 - 6.5 |
| Melones Fault Zone       | 71 | 6.0 - 6.5 |
| Vaca-Kirby Hills Faults  | 75 | 6.5       |
| Cordelia Fault           | 85 | 6.0 - 6.5 |
| West Napa Fault          | 98 | 6.0 - 6.5 |
| Soda Creek Fault         | 96 | 6.0 - 6.5 |

**NOTES:**

<sup>1</sup> Maximum Credible Earthquake. The term maximum credible earthquake (MCE) is defined as the largest earthquake that is likely to be generated along an active fault zone (Slemmons & Chung 1982). The magnitude of the MCE is estimated from the geologic character and earthquake history of the fault. Most workers, when calculating the MCE for the strike-slip faults of the Coast Ranges, estimate the potential length of surface rupture, then use empirical relations which equate rupture length with earthquake magnitude. At a minimum, the MCE must equal the largest historic earthquake on a fault.

SOURCE: *North Central Roseville Specific Plan Draft EIR*, City of Roseville, July 1989.



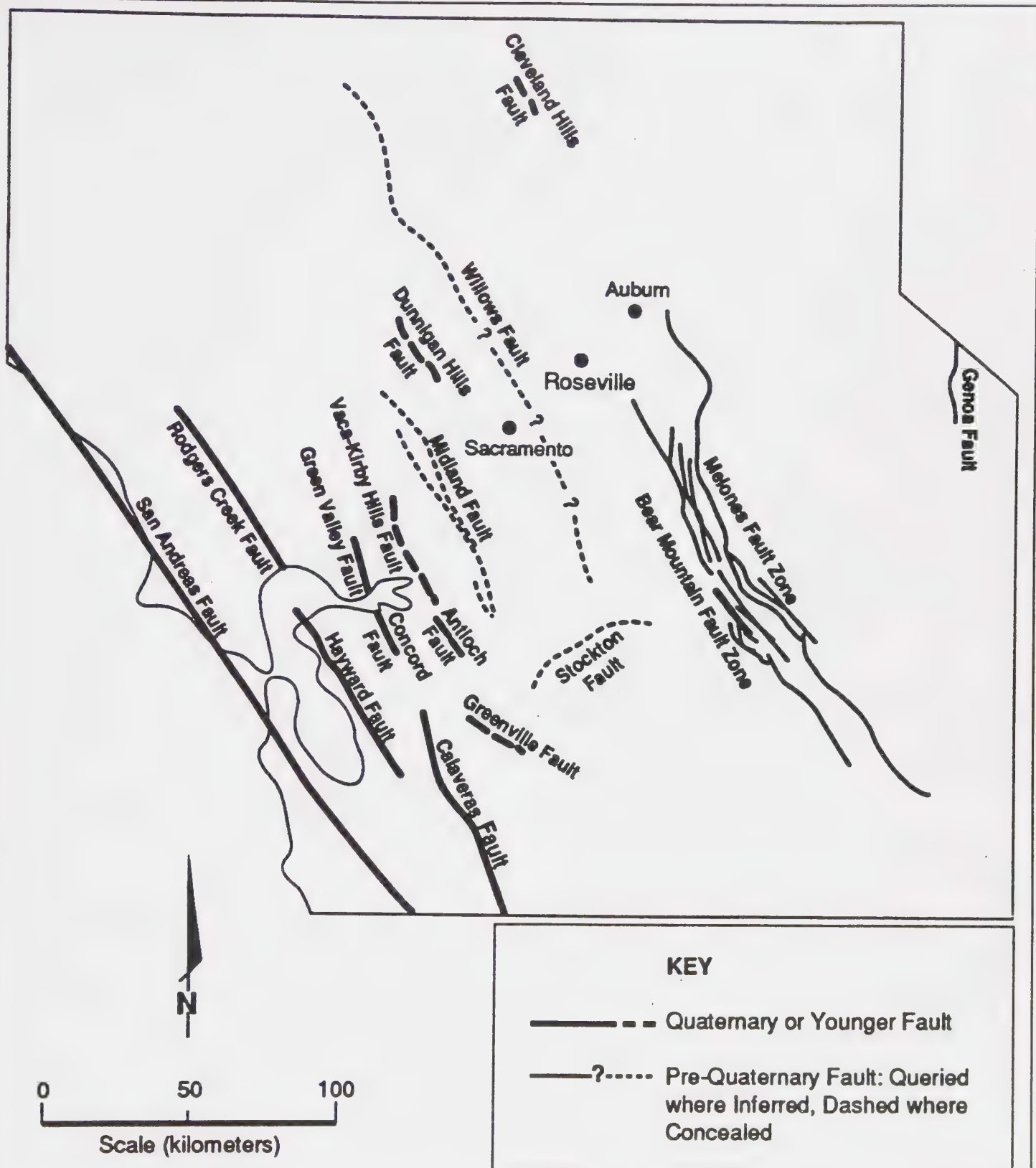


Figure 4.3-3

## Regional Fault Location Map

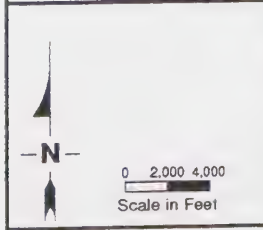
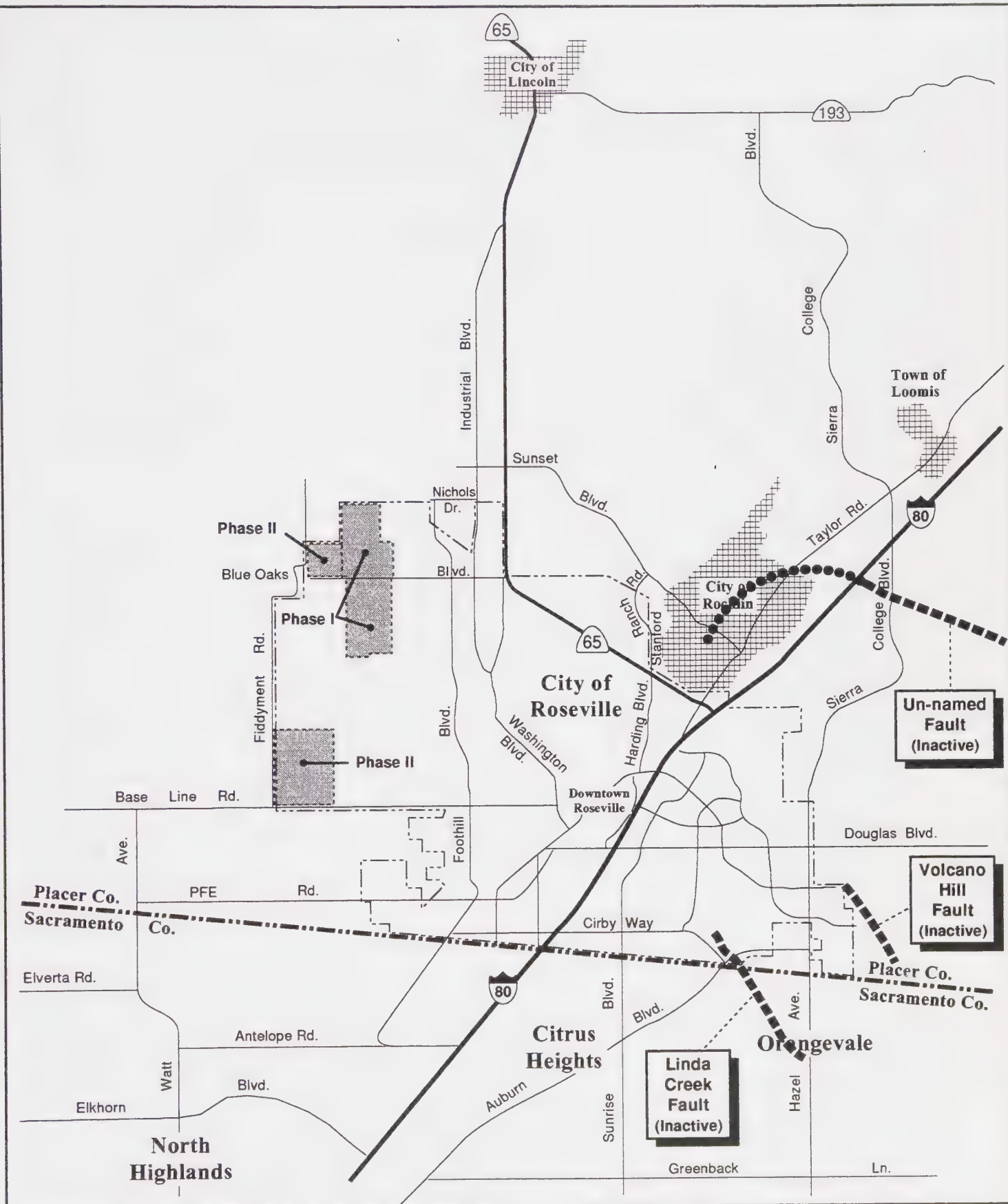
96063

**eip**  
Environmental Impact Professionals

SOURCE: City of Roseville, *Highland Reserve North Project EIR*, August 1996; EIP Associates, March 1997.







Specific Plan Area  
 Roseville City Limits  
 Fault Location  
 Approximate Fault Location  
 SOURCE: City of Roseville, February 1995;  
 EIP Associates, March 1997.

**Figure 4.3-4**

**Local Fault Location Map**

96063 Regional



on the Richter Scale occurred in 1908. The epicenter of this event was located on a north/south line between Folsom and Auburn and on an east/west line between Placerville and Roseville. There have been several less severe events since 1908, but no significant activity has been recorded in the vicinity.

Active faults are those that have experienced displacement in historic time, while inactive faults have not. However, there is the potential for inactive faults to reactivate or experience displacement along a branch of the system sometime in the future. An example of a fault system that is considered to have reactivated is the Foothills Fault System. The system was considered inactive until evidence of an earthquake (approximately 1.6 million years ago) was found near Spenceville, California. Then, in 1975, an earthquake occurred on another branch of the system near the city of Oroville (now known as the Cleveland Hills Fault). The system is now considered potentially active with a low seismic risk. Due to the potential for fault movement, even though the likelihood of the occurrence is low, the following discussion about inactive faults is included in this section.

There are no mapped active faults within Placer County; however, three inactive faults have been mapped east of the Plan Area (see Figure 4.3-4). These include the Volcano Hill Fault, the Linda Creek Fault, and an unnamed fault alignment which extends east/west between Folsom Lake and the City of Rocklin. The Volcano Hill Fault extends northwesterly from Volcano Hill for a distance of approximately one mile, terminating near Eureka Road. There has been no recorded activity along the fault; therefore, it is generally considered inactive. In 1973 the California Division of Mines and Geology identified the "Linda Creek Fault". As the name implies, this alleged fault is located along Linda Creek. The extent of this alleged fault is limited to a segment of creek in the City of Roseville and Sacramento County, east of the Plan Area.<sup>6</sup> The unnamed fault extends east to west between Folsom Lake and the City of Rocklin. Segments of this fault are concealed, and consequently, unmapped. However the east/west alignment suggests that the fault could connect to the Bear Mountain Fault, branches of which are located beneath Folsom Lake. The Bear Mountain Fault is identified as one of the faults that could be undergoing reactivation as a result of continental tectonic activity. However, no such evidence has been observed along the unnamed fault alignment.

## **Secondary Seismic Hazards**

### Liquefaction

Liquefaction is defined as the loss of soil strength due to seismic forces acting on water-saturated granular soils, which leads to quicksand conditions that generate various types of ground failure. The potential for liquefaction must take into account soil type, soil density, depth to the groundwater table, and the duration and intensity of groundshaking. Liquefaction is most likely to occur in low-lying areas of poorly consolidated to unconsolidated water-saturated sediments or similar deposits. Though the City of Roseville's geographic location, soil characteristics and topography combined minimize the risk of liquefaction, a site-specific geotechnical study would need to be performed to adequately characterize liquefaction potential in the Plan Area.



### Subsidence

Subsidence in the sinking of the ground surface usually due to groundwater withdrawal or other subsurface collapse or extraction. The Roseville area is not known to have experienced significant subsidence or subsequent constraints to development due to subsidence.<sup>7</sup>

### Soils

#### **Soil Characteristics**

Soils of the Central Valley are generally characterized as erosional deposits of the Sierra Nevada to the east. Soil limitations can include slow or very slow permeability, limited ability to support a load, high shrink-swell potential, moderate depth to hardpan, low depth to rock, and frequent flooding. The US Soil Conservation Service (SCS) has identified and mapped soils in Placer County. Each identified soil has characteristics that affect soil behavior. Characteristics of importance to this project include the following:

#### Shrink-Swell Potential

The potential for volume change in a soil with a loss or gain in moisture. If the shrink-swell potential is rated moderate to high, damage to buildings, roads, and other structures can occur.

#### Permeability

The ability of a soil to transmit water or air. Permeability is considered in the design and construction of soil drainage systems, where the rate of water movement under saturated conditions affects the behavior of water movement through the soil.

#### Erosion

The susceptibility of a soil to water or wind transport.

#### Runoff

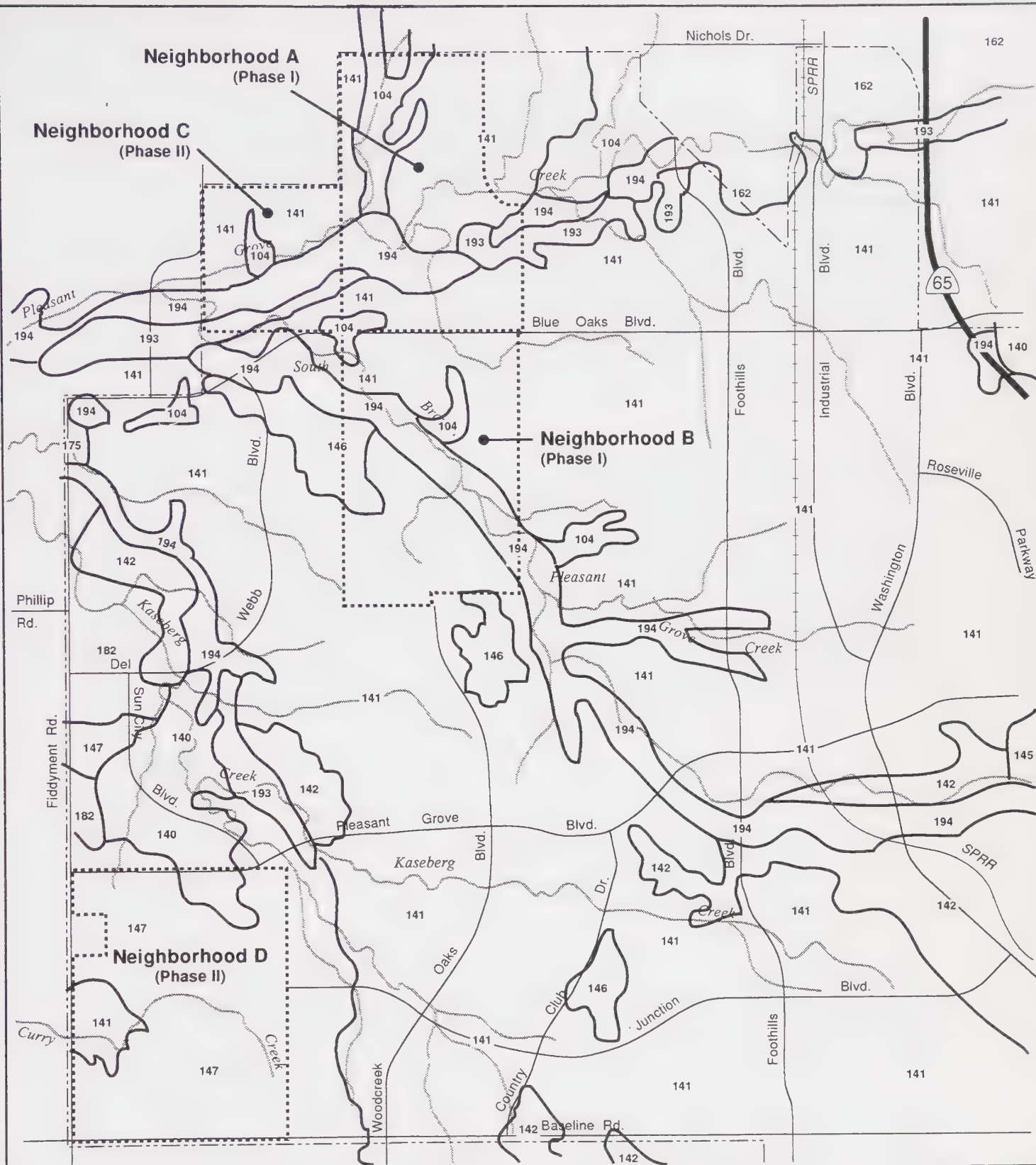
The volume of rainwater directly leaving an area in surface drainage, as opposed to the volume that seeps out as groundwater.

#### **Soil Types in the Plan Area**

The following is a description of the soils and soil complexes found in the Plan Area. Site soils are illustrated in Figure 4.3-5.

#### 104 - Alamo-Fiddymment Complex

This soils complex is comprised of nearly level to gently undulating soils found on low terraces at elevations of 50 to 130 feet. The unit is 50 percent Alamo soils and 30 percent Fiddymment



**Figure 4.3-5**

**Soils Map**

- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Streamcourses/Creeks
- Soils Boundaries

SOURCE: City of Roseville, February 1995;  
EIP Associates, May 1997.

0 1/4 1/2  
Scale In Miles



96063  
Base







soils. The Alamo soil is in nearly level basins and drainage-ways, and the Fiddymment is on side slopes and ridges. The Alamo soil is a poorly drained clay that is moderately deep over hardpan. It has slopes of 0 to 2 percent and is formed in fine textured alluvium from mixed sources. The Alamo soil is characterized by slow permeability, slow or ponded surface runoff, a slight erosion hazard and high shrink-swell potential. The Fiddymment soil is well drained and is moderately deep over hardpan. It is formed in old valley fill indurated siltstone or sandstone. It is characterized by slow permeability, slow surface runoff, a slight erosion hazard and a high shrink swell potential below one foot. The major constraints to development on this complex are very slow permeability, inability to support a load and a high shrink-swell potential. This soil complex is found throughout the northern portion of the Plan Area.

#### 141 - Cometa-Fiddymment Sandy Loams

This soils complex is comprised of undulating soils found on low terraces at elevations of 75 to 200 feet. The Cometa component is a deep, well-drained claypan soil that is formed in alluvium from granitic sources. It is characterized by very slow permeability, slow surface runoff, a slight erosion hazard, and a low surface but high at depth shrink-swell potential. The Fiddymment component is a well-drained soil that is moderately deep over hardpan and formed in old valley fill siltstone. It is characterized by very slow permeability, slow surface runoff, a slight erosion hazard, and a low surface but high at depth shrink-swell potential. The major constraints to development on this soil complex is the very slow permeability, the high shrink-swell potential and the inability to support a load. This soil complex is found throughout the northern portion of the Plan Area and along the western boundary of the Woodcreek West property.

#### 146 - Fiddymment Loam

The Fiddymment loam is similar to the Fiddymment component of the Cometa-Fiddymment complex described above with the following exceptions: it is characterized by slow to medium runoff and a slight to medium erosion hazard. It is present in a very limited quantities in the northern portion of the Plan Area.

#### 147 - Fiddymment-Kaseberg Loams

This complex is found on low siltstone terraces at elevations of 75 to 135 feet. This complex is comprised of 50 percent Fiddymment soil and 30 percent Kaseberg soil. The Fiddymment component is moderately deep over a hardpan and the Kaseberg is shallow over a hardpan. The Kaseberg component of this complex is a well-drained soil formed over hardpan that is formed in old valley fill siltstone. Permeability of the soil is moderate; surface runoff is slow to medium; the erosion hazard is slight to moderate; and the shrink-swell potential is low. The Fiddymment component of this complex is characterized by very slow permeability, slow surface runoff, a slight to medium erosion hazard, and a low surface but high subsurface expansion potential. The major constraints to development include the very slow permeability of the subsoil, a moderate depth to hardpan and siltstone, a high subsurface expansion potential and the limited ability to support a load. This complex is located in the southern portion of the Plan Area.



193 - Xerofluvents, Occasionally Flooded

These soils consist of small areas of moderately well-drained, loamy alluvium adjacent to stream channels. The soil is characterized by moderate to moderately slow permeability, a slight erosion hazard and slow surface runoff. The water table is within 30 to 49 inches of the surface during the rainy season, but drops below 60 inches during the dry months. These soils are located immediately adjacent to Pleasant Grove Creek in the Plan Area. These soils consists of alluvial material which is deposited during flooding events in the area. The major constraint to development on this soil unit is the flooding hazard.

194 - Xerofluvents, Frequently Flooded

These soils are similar in character to the Xerofluvents described above; however, this unit is flooded more frequently.

**Soil Constraints in the Plan Area**Shrink-Swell Potential

Expansive soils increase in volume when they absorb water, and decrease in volume when they are dry. With the exception of the xerofluvents, all of the site soils are moderately or highly expansive, either at the surface or the shallow subsurface. These soils could damage structures and building foundations.

Permeability

All of the soils identified in the Plan Area exhibit slow to very slow permeability. These soils transmit water and/or air very slowly and can cause significant ponding and soil drainage problems.

Erosion and Runoff

With the exception of the xerofluvents-frequently flooded, which are located in Phase I and immediately adjacent to stream channels and are highly erosive, the soils on the site are characterized by slow runoff and a slight erosion potential; therefore, they are not considered constraints to development.

**Agricultural Soils**

Soils are also categorized by their potential use as agricultural land. "Prime Farmland" is defined by the State Department of Conservation as land that has the best combination of physical and chemical characteristics for the production of crops. These lands generally consist of Class I and II soils. They have the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. "Farmland of Statewide Importance" is defined by the State Department of Conservation as land that has a good combination of physical and chemical

characteristics for the production of crops and has been used for the production or irrigated crops within the last three years. None of the Plan Area has been designated as Prime Farmland or Farmland of Statewide Importance.<sup>8</sup> The Land Use section of this document further describes the issues related to project development and Prime Farmland (see Section 4.1).

### 4.3.3 REGULATORY SETTING

The City of Roseville Planning and Public Works Departments maintain policies and guidelines regarding grading, erosion control, inspection and permitting. In addition, it may be necessary to obtain easements for control structures and any associated piping and/or utilities. Permits that are related to geology and may be required for the Specific Plan include:

- grading permits from the City of Roseville Public Works Department;
- construction permits from the City of Roseville Building Department;
- drilling permits for geotechnical borings, piling borings or irrigation well borings from the County Department of Environmental Health;
- well-abandonment permits from the Regional Water Quality Control Board; and
- Streambed Alteration Agreement from the California Department of Fish and Game.

Because the Plan Area is not located within an Alquist-Priolo Special Studies Zone, no associated provisions would be required for project development.

### 4.3.4 IMPACTS

In order to provide a more conservative (i.e., "worst case") impact analysis, the following discussion uses the site's existing conditions as the baseline scenario to which the Proposed Project is added. Impacts would not be different or more severe at 2010.

#### Method of Analysis

The California Division of Mines and Geology (CDMG) fault activity map and local studies and the Alquist-Priolo Special Studies Zone Act were reviewed to identify potential faults and seismic hazards in the Plan Area and from a regional perspective.

The USDA Soil Conservation Survey for Placer County was reviewed to identify soil constraints present on the project site. Soil constraints could include high shrink-swell potential, high erosion potential and unstable slopes along drainages and creeks. Mineral resource maps from CDMG were reviewed to determine whether project development could occur over important mineral resources.

As stated above, the impacts of the Proposed Project are measured against existing conditions, which are primarily undeveloped grasslands, creeks and riparian areas. It should be noted that two of the properties in Phase I, Diamond Creek and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impact analysis does not assume development of these light industrial designations, it can be considered a "worst-case" analysis. That is, if the Proposed

Project were compared to developing the Plan Area under existing entitlements, the impacts could be less severe than those identified below.

### **Standards of Significance**

For the purpose of this EIR, an impact was considered significant if the Proposed Project could result in:

- The exposure of people or structures to major geologic hazards, such as substantial surface rupture, groundshaking, liquefaction, slope failure or landslides;
- Structures being located in an Alquist-Priolo Special Studies Zone;
- Structures being placed on soils that are likely to collapse or subside, or that exhibiting expansive characteristics that could damage foundations or structures;
- Substantial increase in erosion due site disturbance; or
- The loss of, or loss of access to, mineral resources identified in a Mineral Resource Zone by the CDMG.

### **PHASE I IMPACTS**

|                            |                                                                             |
|----------------------------|-----------------------------------------------------------------------------|
| <b>IMPACT 4.3-1(A):</b>    | <b>Construction of structures in an area of potential seismic activity.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                       |
| <b>MITIGATION MEASURE:</b> | None required                                                               |

Placer County is classified as a low severity earthquake zone and no active faults are known to exist within the county. Phase I is considered to have a low seismic risk with respect to such seismic effects as faulting, ground rupture, liquefaction and ground lurching. Therefore, it is unlikely that property damage or safety hazards would result from a major seismic event on regional faults. However, the potential risk associated with a major earthquake cannot be completely dismissed. Construction must be in accordance with the Uniform Building Code (UBC) and local building standards as administered by City of Roseville Building Department to reduce the risk of seismic-related safety hazards and structural damage (to pipelines, roads, and residential homes) from groundshaking to an acceptable level.

Regular monitoring and enforcement of the UBC requirements regarding seismic and geologic safety would ensure that new development and construction meet all seismic and geologic safety standards, ultimately protecting the public by reducing the risk of building damage or collapse. Therefore, the seismic activity in Phase I is less than significant.



|                               |                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.3-2(A):</b>       | <b>Potential failure of structures and infrastructure facilities due to construction on soils that exhibit slow permeability, low strength and high shrink-swell potential.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                                                                     |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.3-1 (Comply with site-specific geotechnical evaluation)                                                                                                    |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                                                                           |

Based on information obtained from the U.S. Soil Conservation Service, the majority of the soils on the site have slow permeability, low strength and high shrink-swell potential. The physical forces resulting from the shrink-swell processes of the soils can exert pressure on foundations and infrastructure lines which in turn could result in pipeline and foundation damage. Soils exhibiting low strength can cause damage to structural foundations, and soils characterized by slow permeability can cause drainage problems. Based on available information, the soil conditions in the Plan Area do not appear to pose any constraints to residential or commercial construction or infrastructure placement that cannot be overcome through the application of standard engineering practices. A site-specific geotechnical evaluation prepared by the Applicant would include recommendations for alleviating constraints due to high shrink-swell potential.

Compliance with the recommendations set forth in the site-specific geotechnical evaluation, as required by Mitigation Measure 4.3-1, would reduce this impact to a less-than-significant level.

|                               |                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.3-3(A):</b>       | <b>Grading activities could cause slope instability along steep stream channels and increased erosion in the Plan Area.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                 |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.3-1 (Comply with site-specific geotechnical evaluation)                                                |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                       |

Implementation of Phase I would include grading activities. Grading activities would be required throughout for the development of residential, commercial, and the public/quasi-public uses including new roadways. The resulting alterations to the existing topography and ground cover could increase soil erosion. The site topography consists of gently rolling and undulating ground surface with steep banks along some stream channels. Grading activities could cause slope instability along the steep creek channels, particularly in the areas identified for roadway bridges.

Although the soils located in Phase I are predominantly characterized by a slight erosion potential, the frequently flooded xerofluvents located immediately adjacent to the stream channels can be moderately to highly erosive. Site grading, particularly along the stream channels, could cause subsequent soil erosion ultimately affecting water quality in the area. Impacts on water quality are further assessed in Section 4.4, Hydrology and Water Quality.



In addition, the Proposed Project must comply with the City of Roseville Improvement Standards. As stated in the Standards, in order to receive a grading permit the Applicant must submit a site-specific erosion and sedimentation control plan as well as comply with any requirements set forth by the State Water Resources Control Board. Compliance with the applicable General Plan policies as well as the City of Roseville Improvement Standards and the site-specific geotechnical report as required by Mitigation Measure 4.3-1, would reduce this impact to a less-than-significant level.

|                            |                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------|
| <b>IMPACT 4.3-4(A):</b>    | <b>Inaccessibility to potential mineral resources located within the Plan Area.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                               |
| <b>MITIGATION MEASURE:</b> | None required                                                                       |

Though the entire Plan Area has not undergone a detailed evaluation for mineral resources by CDMG, Phase I has been classified as MRZ-1 (areas with no significant mineral deposits), MRZ-3 (areas containing mineral deposits the significance of which cannot be evaluated from available data) and MRZ-4 (areas where available information is inadequate for assignment to any MRZ zone). The majority of MRZ-3 and MRZ-4 designations in the Plan Area occur along the creeks, which are areas proposed for open space. There are portions of the Plan Area proposed for permanent structures that are designated MRZ-3 and MRZ-4, in the Woodcreek North and Diamond Creek parcels. Because permanent structures would be developed in these areas, there would be loss of accessibility to potential mineral resources within Phase I.

The Surface Mining and Reclamation Act (SMARA) encourages jurisdictions to evaluate MRZ-3 designated resources to evaluate the extent of the deposit. However, this is not a requirement and development on land designated MRZ-3 is allowed. Given that there are no mining operations in the City of Roseville and the area has been identified for development, this is considered a less-than-significant impact.

|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| <b>IMPACT 4.3-5(A):</b>    | <b>Topographic changes due to grading activities.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                 |
| <b>MITIGATION MEASURE:</b> | None required                                         |

Development of Phase I would result in alterations to the existing site topography due to grading activities. Any area outside of the Open Space designations and non-developable areas could be modified to accommodate new development. Grading activities would be necessary to prepare the site for proposed new structures and infrastructure. In addition, there would be a general leveling of the gently undulating topography that is present on the site. The change in topography is consistent with surrounding land uses; therefore, it is considered a less-than-significant impact.

**FULL PROJECT IMPACTS**

|                            |                                                                             |
|----------------------------|-----------------------------------------------------------------------------|
| <b>IMPACT 4.3-1(B):</b>    | <b>Construction of structures in an area of potential seismic activity.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                       |
| <b>MITIGATION MEASURE:</b> | None required                                                               |

As discussed above under Impact 4.3-1(A), the Plan Area is located in a region of low seismicity. In addition, a variety of measures are in place that would ensure development would conform to current seismic safety regulations thereby reducing the impact of seismic activity on the Full Project to a less-than-significant level.

|                               |                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.3-2(B):</b>       | <b>Potential failure of structures and infrastructure facilities due to construction on soils that exhibit slow permeability, low strength and high shrink-swell potential.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                                                                     |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.3-1 (Comply with site-specific geotechnical evaluation)                                                                                                    |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                                                                           |

Similar to Phase I (see Impact 4.3-2(A)), the soil conditions in Phase II of the Plan Area do not appear to pose any significant constraints to residential or commercial construction or infrastructure placement that cannot be overcome through the application of standard engineering practices. The site-specific geotechnical evaluation required by Mitigation Measure 4.3-1 would include recommendations for alleviating constraints due to high shrink-swell potential. Compliance with the applicable General Plan policies, City Improvement Standards and the recommendations set forth in the geotechnical evaluation would reduce the Full Project impact to a less-than-significant level.

|                               |                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.3-3(B):</b>       | <b>Grading activities could cause slope instability along steep stream channels and increased erosion in the Plan Area.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                 |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.3-1 (Comply with site-specific geotechnical evaluation)                                                |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                       |

As discussed above under Impact 4.3-3(A), grading activities associated with project construction could cause slope instability along the steep creek channels, particularly in the areas identified for roadway bridges. Compliance with the NRSP policies, City Improvement Standards and Mitigation Measure 4.3-1 would reduce Full Project impacts to a less-than-significant level.

|                            |                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------|
| <b>IMPACT 4.3-4(B):</b>    | <b>Inaccessibility to potential mineral resources located within the Plan Area.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                               |
| <b>MITIGATION MEASURE:</b> | None required                                                                       |

In addition to the discussion under Impact 4.3-4(A), there are portions of Phase II proposed for permanent structures that are designated MRZ-3 and MRZ-4. These areas occur in the Woodcreek West and Walaire 160 properties. Because permanent structures would be developed in these areas, there would be loss of accessibility to potential mineral resources within the Full Project.

As mentioned above, there are no mining operations in the City of Roseville. Because this area has been anticipated for future development by means of the urban reserve land use designation, this is considered a less-than-significant impact.

|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| <b>IMPACT 4.3-5(B):</b>    | <b>Topographic changes due to grading activities.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                 |
| <b>MITIGATION MEASURE:</b> | None required                                         |

Please see discussion above under 4.3-5(A).

#### **4.3.5 MITIGATION MEASURES**

##### **ONSITE SOIL CONSTRAINTS**

##### **Mitigation Measure 4.3-1: Comply with site-specific geotechnical evaluation.**

Mitigation Measure 4.3-1 applies to Impacts 4.3-2 (A) and (B) and 4.3-3 (A) and (B).

Prior to the commencement of any earthwork on the Proposed Project, a full-scale geotechnical investigation shall be completed. The geotechnical investigation shall include:

- Soil borings;
- Laboratory testing; and
- Grading and design recommendations.

The grading and design recommendations should, at a minimum, address the following issues:

- Fill control plan;
- Expansive soils;
- Differential settlement;
- Slope instability;
- Foundation instability;
- Stream bank protection; and
- Other significant geological characteristics pertinent to proper development of the Plan Area.



The geotechnical investigation shall consist of soil borings to collect samples and laboratory testing to determine the appropriate design parameters for use in determination of the structural fill, roadbed fill, and landscaping fill requirements, along with the fill placement requirements. The various soils should also be tested for corrosivity, to allow for proper foundation design.

The geotechnical evaluation shall also provide grading and design recommendations to address potential slope and foundation instability, stream bank protection and slope evaluation, expansive soils, and differential settlement. The report shall evaluate the soil types to test for shrink-swell potential to determine load bearing and strength concerns.

Design of engineered fills shall require that the geotechnical investigation assess the structural properties of each of the different soils types throughout the Proposed Project site. Such an investigation would address specific areas of the Proposed Project site to be developed in order to account for the various structures and roadways proposed for that particular area. In addition to evaluation for engineered fills, specific geotechnical evaluation of engineered slopes shall be included in the geotechnical evaluation. All proposed cut and/or fill slopes shall be evaluated for proper design in order to reduce the hazard of over-steepening and/or removing of their lateral support, both of which could lead to slope instability, structural failure, and landsliding. If necessary, slopes shall be designed with additional lateral support, such as buttressing, and fill slopes shall be properly keyed into competent formational materials. Slopes (banks) along the creek channels shall be designed with proper slope protection to prevent soil erosion and channel-bank undercutting.

Grading and fill placement shall be monitored and compaction testing should be performed to ensure proper placement of all fill types (structural, non-structural, and roadbed).

In addition to the measures mentioned above, soils shall be tested for their shrink-swell potential. Soils with low strength and/or high shrink-swell potential shall be controlled by over-excavation, or covering with a sufficient amount of granular soils (as determined by the geotechnical investigation). Potentially expansive soils shall only be placed in areas determined not to consist of structural fill.

The City of Roseville Department of Public Works Improvements Standards require that a grading permit be obtained prior to grading activities. At this time the Applicant must submit, for review and approval, Improvement and/or Grading Plans along with a site-specific erosion and sedimentation control plan.

These measures would reduce the impacts for differential settlement, foundation instability, expansive soils, and slope instability to levels that are less than significant.



**TABLE 4.3-2****SOILS, GEOLOGY AND SEISMICITY RESIDUAL IMPACT SUMMARY**

| <b>Impact</b>                                                                                                                                                                           | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|
| 4.3-1(A and B) Construction of structures in an area of potential seismic activity.                                                                                                     | Less than significant  | Less than significant       |
| 4.3-2(A and B) Potential failure of structures and infrastructure facilities due to construction on soils that exhibit slow permeability, low strength and high shrink-swell potential. | Less than significant  | Less than significant       |
| 4.3-3(A and B) Grading activities could cause slope instability along steep stream channels and increased erosion in the Plan Area.                                                     | Less than significant  | Less than significant       |
| 4.3-4(A and B) Inaccessibility to potential mineral resources located within the Plan Area.                                                                                             | Less than significant  | Less than significant       |
| 4.3-5(A and B) Topographic changes due to grading activities.                                                                                                                           | Less than significant  | Less than significant       |

## ENDNOTES

1. City of Roseville, *Comprehensive Land Use Element Update Project, Draft Environmental Impact Report*, February 1995.
2. City of Roseville, *Comprehensive Land Use Element Update Project, Draft Environmental Impact Report*, February, 1995.
3. *Draft West Roseville Baseline Studies*, September 1994, *Appendix B, Lithologic Descriptions*.
4. *City of Roseville General Plan*, November 18, 1992.
5. City of Roseville, *North Central Roseville Specific Plan, Annotated Draft Environmental Impact Report*, SCH # 88053010, 1990.
6. *City of Roseville General Plan*, November 18, 1992, *Safety Element*.
7. *City of Roseville General Plan*, November 18, 1992, *Safety Element*.
8. Placer County Farmland Designation Map, Placer County Planning Department, May 1994.



---

---

#### ***4.4 HYDROLOGY AND WATER QUALITY***

---

---





---

---

## ***4.4 HYDROLOGY AND WATER QUALITY***

---

---

### **4.4.1 INTRODUCTION**

This section addresses the effects of the proposed NRSP on the hydrologic characteristics of the Plan Area including surface water flow, groundwater recharge, flooding and drainage, and surface and groundwater quality.

Both Phase I and the Full Project (Phases I and II combined) are evaluated using the site's current existing conditions.

### **4.4.2 ENVIRONMENTAL SETTING**

#### **Surface Water Hydrology**

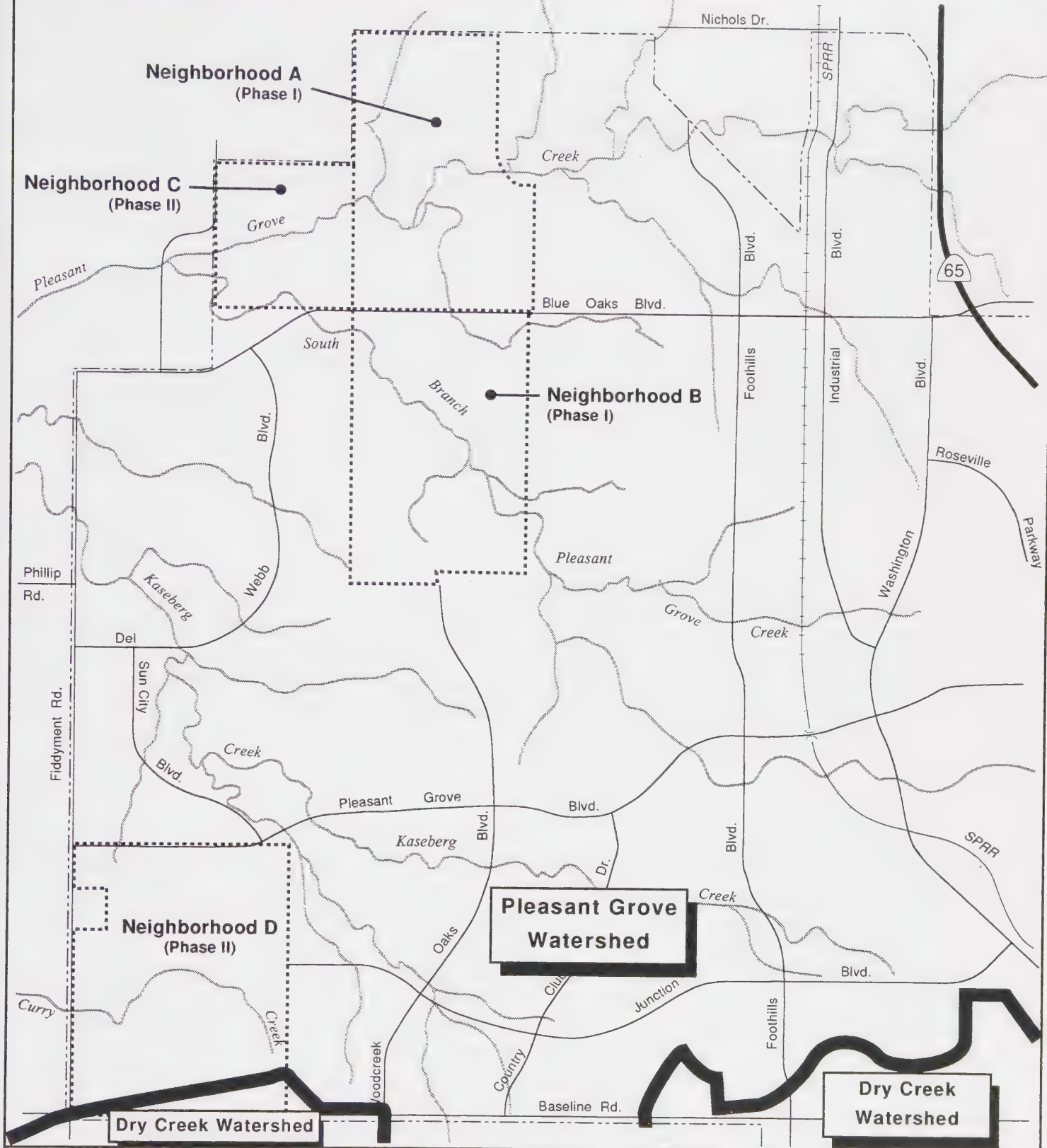
Roseville is located in the Sacramento River Basin which encompasses approximately 26,500 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Delta-Central Sierra area to the south. The Sacramento River is the principal river in the basin. The principal tributaries to the Sacramento River include the Pit, Feather, Yuba, Bear, and American Rivers to the east.

The Plan Area is located mostly within the watershed of Pleasant Grove Creek. Primary tributaries to Pleasant Grove Creek in the Plan Area include the South Branch of Pleasant Grove Creek and Curry Creek. A small portion of the southern section of Neighborhood D (Woodcreek West) is located within the Dry Creek Watershed (see Figure 4.4-1).

#### **Pleasant Grove Creek Watershed**

The headwaters of Pleasant Grove Creek are located about five miles east of the Plan Area, near Citrus Colony Road and Humphrey Road, north of Rocklin. The creek flows west toward and through the Diamond Creek and Walaire 160 properties. The headwaters of the South Branch of Pleasant Grove Creek are located near the border between Roseville and Rocklin. The creek flows northwest, forming the boundary between the Mourier 140 and Woodcreek North properties. From there, the South Branch flows through the southern part of the Walaire 160 property and joins Pleasant Grove Creek about one-quarter mile west of the Walaire property. Pleasant Grove Creek continues in a westerly direction and flows into Pleasant Grove Creek Canal, approximately seven miles downstream of the City limits. The Pleasant Grove Creek Canal flows into Cross Canal in Sutter County and into the Sacramento River just south of its confluence with Feather River, approximately 14 miles west of Roseville. The Pleasant Grove Creek watershed drains an area of approximately 16 square miles.





- |         |                                                 |      |                      |
|---------|-------------------------------------------------|------|----------------------|
| .....   | Neighborhood Boundary Within Specific Plan Area | ———— | Streamcourses/Creeks |
| - - - - | Roseville City Limits                           | ———— | Watershed Boundary   |
| ————    | Existing and Approved Roads                     |      |                      |

**Figure 4.4-1**

**Plan Area Watersheds**

0 1/4 1/2  
Scale In Miles



96063  
Base



SOURCE: City of Roseville, February 1995; EIP Associates, May 1997.





The headwaters of Curry Creek are located about three-quarters of a mile east of Fiddymment Road near the eastern boundary of the Woodcreek West property. The creek flows west through the center of the Woodcreek West property and flows to the Pleasant Grove Creek Canal about nine miles west of the Plan Area. Kaseberg Creek joins Pleasant Grove Creek just west of the City boundaries.

### **Dry Creek Watershed**

The areas of the City not in the Pleasant Grove Creek watershed are located in the Dry Creek watershed. The Dry Creek watershed drains an area of approximately 80 square miles. Tributaries to Dry Creek include Cirby Creek, Linda Creek, Miners Ravine, Secret Ravine, Strap Ravine, Antelope Creek, and False Ravine. Dry Creek flows west until it joins with the Natomas East Main Drainage Canal which ultimately drains to the American River. Approximately 25 to 30 acres in the southeast corner of the Woodcreek West property lie within the Dry Creek Watershed.

### **Flooding**

In the Roseville area, flooding is primarily associated with storm runoff exceeding the capacity of stream channels and drainage facilities. Reports of flooding along Dry, Antelope, Cirby, and Linda Creeks have been recorded from the 1930s to present. The largest storm event on record occurred in February 1986. This event caused substantial flooding and property damage. In January 1995, a storm event of significant magnitude occurred which also caused wide spread flooding and property damage along Dry Creek in Roseville.

### 100-Year Floodplain

The 100-year floodplain is an area that is subject to inundation from a flood that has a one in a hundred chance of occurring in any given year. Floodplain designations have been defined by the Federal Emergency Management Agency (FEMA), and City of Roseville consultants. The City and FEMA have restrictions for development in designated floodplain, described in Section 4.4.3.

In 1987, the City of Roseville supplemented the FEMA designated floodplain with an analysis conducted by Nolte and Associates. The Nolte study resulted in the mapping of a new floodplain, the "Nolte future floodplain", which is a 100-year floodplain based on modeling of the buildout of the Pleasant Grove and Dry Creek watersheds (including the Plan Area). The base flood elevations (100-year floodplain elevation) assumed development within the floodway fringe. The floodway fringe is the area along the boundary of the floodplain which, if totally obstructed, would not result in more than a one-foot increase in water surface elevation. The Nolte future floodplain is considered a worst-case scenario because it included full buildout of the watersheds.<sup>1</sup>

Portions of the Plan Area, along Pleasant Grove Creek, the South Branch of Pleasant Grove Creek and Curry Creek are located in the 100-year floodplain (see Figure 4.4-2). The high-water mark from the 1995 floods along Pleasant Grove Creek east of the Plan Area was found to be within the floodplain as delineated by the 1987 City of Roseville Official Flood Plain Maps and Profiles.<sup>2</sup>

Tables 4.4-1 and 4.4-2 summarize floodplain elevations calculated by Nolte and Associates for Pleasant Grove Creek and the South Branch of Pleasant Grove Creek in the Plan Area. The locations of the estimated flood elevations and peak flow are shown on Figure 4.4-3 (Locations of Estimated Flood Elevations and Peak Flows for Pleasant Grove Creek). Floodplain elevations are not available for Curry Creek.<sup>3</sup> As part of the 1994 West Roseville Baseline Studies conducted for the Plan Area, the engineering firm of CH2M Hill reviewed the Nolte floodplain data for the Plan Area for accuracy and to determine if updating of the floodplain mapping would be required to account for current and future conditions. The CH2M Hill's review concluded that the Nolte flood models reasonably represented the Pleasant Grove and the south branch of the Pleasant Grove stream channels. CH2M Hill's estimates of 100-year flood flows were generally within five to ten percent of those estimated in Nolte's 1987 study; therefore, the delineated floodplain elevations for the Plan Area were deemed adequate.<sup>4</sup>

CH2M Hill also conducted a hydrologic analysis to determine existing and future flows in the intermittent drainages which are tributary to Pleasant Grove Creek, South Branch of Pleasant Grove Creek, and Curry Creek, which were not included in the City of Roseville Official Flood Plain Maps and Profiles. Tables 4.4-3 through 4.4-6 present the results of this study, which assumed full buildout, and show existing and future flows for the 10-year and 100-year events.<sup>5</sup> Locations of intermittent drainages and associated subbasins that were analyzed are shown in Figure 4.4-4 (Locations of Intermittent Drainages in Plan Area).

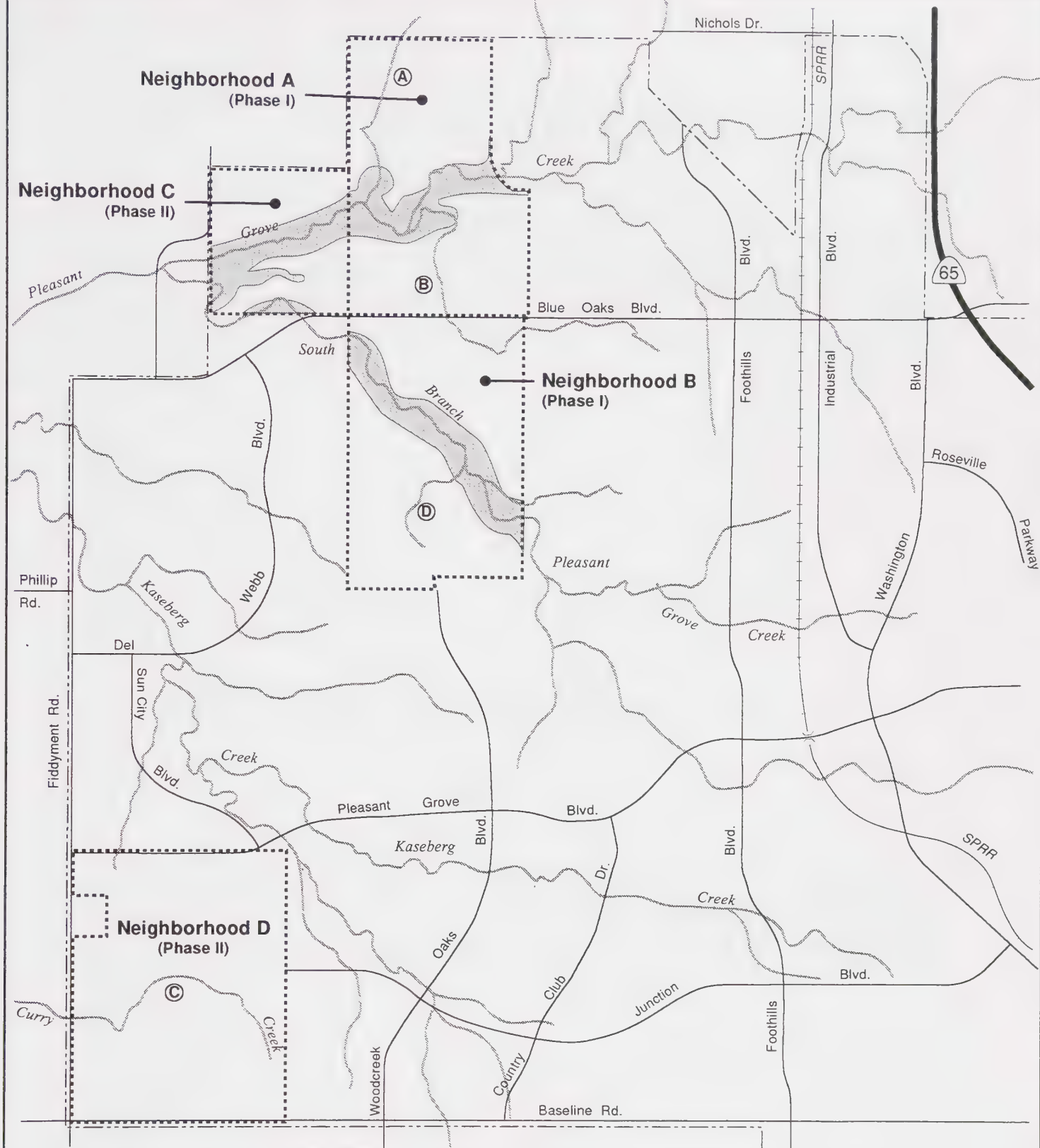
### Floodplain Management

#### *City of Roseville*

The City of Roseville has developed several flood mitigation programs and maintains several flood control projects within its jurisdiction. Through its Floodplain Designation Policy No.2 and other General Plan policies, the City restricts the placement of fill in floodplains and floodways within the City's jurisdiction. Roseville has a flood alert and early warning system to monitor stream flows and precipitation through a network of computer-linked sensors located in stream channels. When water levels reach critical stages, measures are implemented including portable dikes, traffic diversions, and flood-warning broadcasts.<sup>6</sup>

The City developed a regional flood control plan for Pleasant Grove Creek along the western portion of the City. The plan includes provisions for construction of a regional stormwater retention pond in western Placer County downstream of the Plan Area and channel improvements between the regional retention pond and the confluence of Pleasant Grove and Kaseberg Creeks. A feasibility study was prepared in May 1990 to develop the cost basis for such a facility.<sup>7</sup> All new developments within the watershed in the City of Roseville are assessed an impact fee for the acquisition of land and construction of the basin. The fees are based on incremental increase in runoff volume coming from each proposed development. At the time the feasibility report was





- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Streamcourses/Creeks



Plan Area Floodplain

(A)

Tributary to Pleasant Grove Creek

(B)

Tributary to Pleasant Grove Creek

(C)

Tributary to Curry Creek

(D)

Tributary to South Branch of Pleasant Grove Creek

**Figure 4.4-2**

### Approximate Plan Area Floodplain

0 1/4 1/2  
Scale In Miles



96063  
Base



SOURCE: City of Roseville, *Official Floodplain, Maps and Profiles*, May 1987; EIP Associates, May 1997.





**TABLE 4.4-1**

**ESTIMATED FLOOD ELEVATIONS AND PEAK FLOWS  
FOR PLEASANT GROVE CREEK (As Shown in Figure 4.4-3)**

| <b>Location<sup>1</sup></b>                         | <b>100-Year<br/>Peak Flow<br/>(cfs)</b> | <b>100-Year<br/>Flood<br/>Elevation<br/>(feet NGVD)</b> | <b>10-Year Flood<br/>Elevation<br/>(feet NGVD)</b> | <b>Floodplain<br/>Width<br/>(feet)</b> | <b>Floodway<br/>Width<br/>(feet)</b> |
|-----------------------------------------------------|-----------------------------------------|---------------------------------------------------------|----------------------------------------------------|----------------------------------------|--------------------------------------|
| Fiddymment Road (FR)                                | 5,630                                   | 92                                                      | 90                                                 | 850                                    | 125                                  |
| Western Boundary<br>Walaire 160 Property<br>(WW)    | N/A                                     | 92.5                                                    | 90.5                                               | 975                                    | 200                                  |
| Eastern Boundary<br>Diamond Creek<br>Property (EDC) | 4,020                                   | 99                                                      | 97.8                                               | 475                                    | 250                                  |

**NOTES:**

<sup>1</sup> Letter code in parentheses following location description denotes location shown on Figure 4.4-3 (Locations of Estimated Flood Elevations and Peak Flows for Pleasant Grove Creek).

cfs = cubic feet per second

NGVD = National Geodetic Vertical Datum

N/A = Not Available

SOURCE: City of Roseville, Final West Roseville Baseline Studies, November 1994.

**TABLE 4.4-2**

**ESTIMATED FLOOD ELEVATIONS AND PEAK FLOWS  
FOR SOUTH BRANCH PLEASANT GROVE CREEK (As Shown in Figure 4.4-3)**

| <b>Location<sup>1</sup></b>                           | <b>100-Year Peak<br/>Flow (cfs)</b> | <b>100-Year Flood<br/>Elevation (feet<br/>NGVD)</b> | <b>10-Year Flood<br/>Elevation (feet<br/>NGVD)</b> | <b>Floodplain<br/>Width (feet)</b> |
|-------------------------------------------------------|-------------------------------------|-----------------------------------------------------|----------------------------------------------------|------------------------------------|
| Western Boundary<br>Walaire 160 Property (WWS)        | 1,480                               | 91.8                                                | 90                                                 | 975                                |
| Eastern Boundary<br>Woodcreek North<br>Property (EWN) | 1,430                               | 106.5                                               | 105                                                | 325                                |

**NOTES:**

<sup>1</sup> Letter code in parentheses following location description denotes location shown on Figure 4.4-3 (Locations of Estimated Flood Elevations and Peak Flows for Pleasant Grove Creek).

cfs = cubic feet per second

NGVD = National Geodetic Vertical Datum

N/A = Not Available

SOURCE: City of Roseville, Final West Roseville Baseline Studies, November 1994.





- ..... Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- EDC** Eastern Boundary Diamond Creek
- WW** Western Boundary Walaire 160
- WWS** Western Boundary Walaire 160, South Branch
- FR** Fiddymment Road
- EWN** Eastern Boundary Woodcreek North

SOURCE: City of Roseville, North Roseville Specific Plan Draft EIR, Tables 4.4-1 and 4.4-2, EIP Associates, May 1997.

### Figure 4.4-3

## Locations Of Estimated Flood Elevations And Peak Flows For Pleasant Grove Creek

0 1/4 1/2

Scale In Miles

N

96063 Base

**eip**





**TABLE 4.4-3**

**TRIBUTARY "A" TO PLEASANT GROVE CREEK  
FLOWING FROM THE NORTH ACROSS THE DIAMOND CREEK PROPERTY**

| Subbasin | Flood Discharge (CFS) Downstream of Subbasin |                |                   |                 |
|----------|----------------------------------------------|----------------|-------------------|-----------------|
|          | 10-Year Existing                             | 10-Year Future | 100-Year Existing | 100-Year Future |
| A1       | 17                                           | 35             | 30                | 57              |
| A2       | 60                                           | 97             | 103               | 170             |
| A6       | 127                                          | 190            | 216               | 318             |
| A9       | 148                                          | 214            | 251               | 359             |

NOTE:

cfs = cubic feet per second

SOURCE: City of Roseville, Final West Roseville Baseline Studies, November 1994.

**TABLE 4.4-4**

**TRIBUTARY "B" TO PLEASANT GROVE CREEK  
FLOWING FROM THE SOUTH ACROSS THE MOURIER 140 AND DIAMOND  
CREEK PROPERTIES**

| Subbasin | Flood Discharge (CFS) Downstream of Subbasin |                |                   |                 |
|----------|----------------------------------------------|----------------|-------------------|-----------------|
|          | 10-Year Existing                             | 10-Year Future | 100-Year Existing | 100-Year Future |
| B2       | 42                                           | 53             | 69                | 84              |
| B3       | 126                                          | 163            | 203               | 259             |
| B4       | 176                                          | 224            | 289               | 355             |
| B5       | 230                                          | 277            | 384               | 434             |
| B8       | 287                                          | 325            | 474               | 514             |
| B10      | 304                                          | 341            | 496               | 548             |

NOTE:

cfs = cubic feet per second

SOURCE: City of Roseville, Final West Roseville Baseline Studies, November 1994.

**TABLE 4.4-5**

**CURRY CREEK (TRIBUTARY "C")  
WITHIN THE WOODCREEK WEST PROPERTY**

| Subbasin | Flood Discharge (CFS) Downstream of Subbasin |                |                   |                 |
|----------|----------------------------------------------|----------------|-------------------|-----------------|
|          | 10-Year Existing                             | 10-Year Future | 100-Year Existing | 100-Year Future |
| C2       | 62                                           | 77             | 102               | 123             |
| C5       | 119                                          | 147            | 197               | 241             |
| C7       | 157                                          | 194            | 262               | 321             |

NOTE:  
cfs = cubic feet per second

SOURCE: City of Roseville, Final West Roseville Baseline Studies, November 1994.

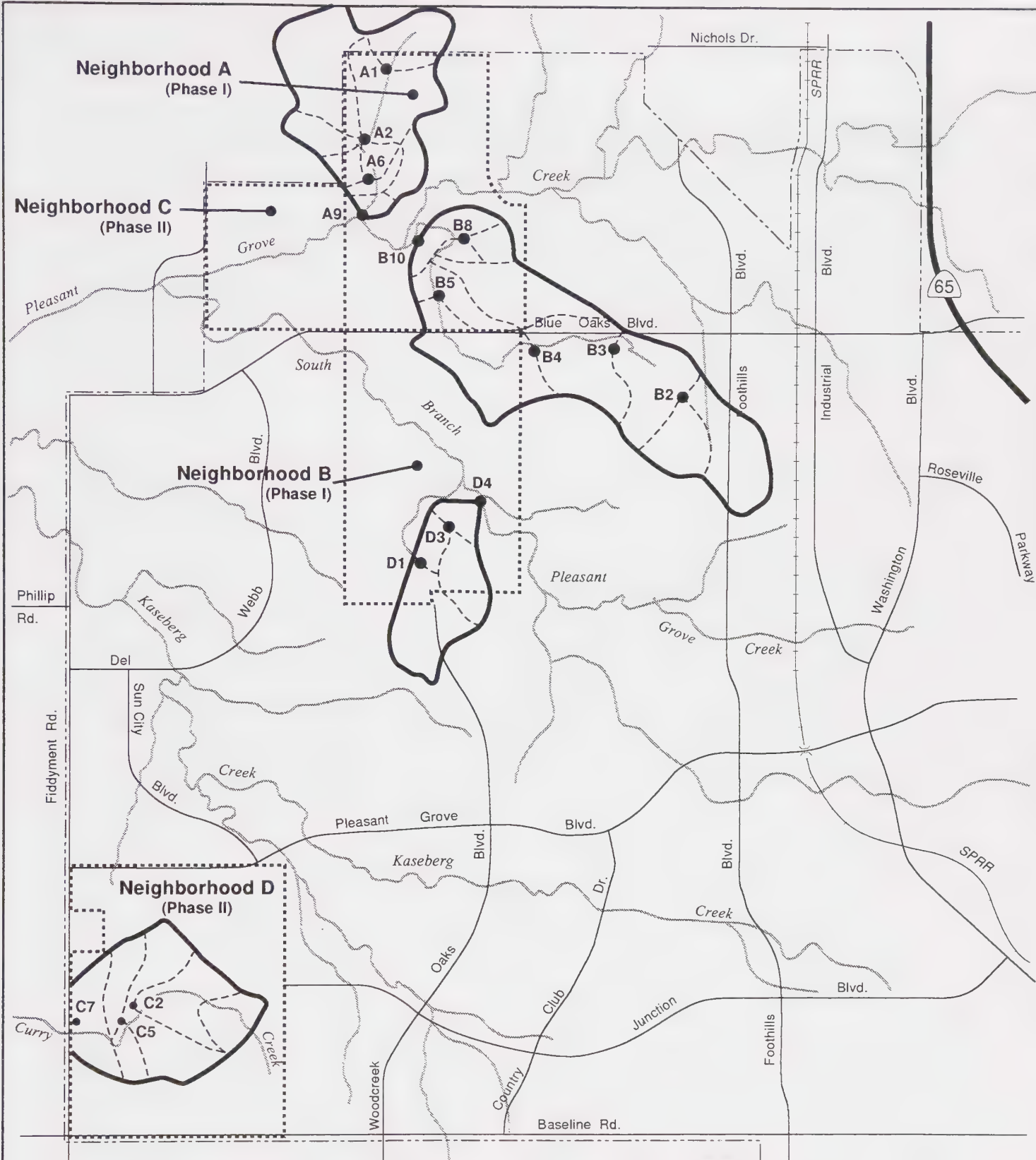
**TABLE 4.4-6**

**TRIBUTARY "D" TO THE SOUTH BRANCH OF PLEASANT GROVE CREEK**

| Subbasin | Flood Discharge (CFS) Downstream of Subbasin |                |                   |                 |
|----------|----------------------------------------------|----------------|-------------------|-----------------|
|          | 10-Year Existing                             | 10-Year Future | 100-Year Existing | 100-Year Future |
| D1       | 45                                           | 66             | 80                | 122             |
| D3       | 86                                           | 112            | 149               | 180             |
| D4       | 96                                           | 119            | 159               | 191             |

NOTE:  
cfs = cubic feet per second

SOURCE: City of Roseville, Draft Baseline Studies, 1994.



----- Neighborhood Boundary Within Specific Plan Area

----- Roseville City Limits

----- Existing and Approved Roads

----- Intermittent Drainage Basin Boundaries

----- Subbasin Boundaries

A1 ● Subbasins

**Figure 4.4-4**

### Intermittent Drainages In The Plan Area

0 1/4 1/2  
Scale In Miles



96063  
Base



SOURCE: City of Roseville, *Final West Roseville Baseline Studies*, Roseville, California, EIP Associates, May 1997.





prepared, some developments, such as Del Webb and the NRSP were not addressed in the study. For such developments, the City of Roseville requires that the developer demonstrate that the planned retention facility can accommodate the additional flows from the new development.<sup>8</sup>

The City of Roseville has also initiated the Cirby-Linda-Dry Creek Flood Control Project to provide flood protection for properties in the Nolte future floodplain. The proposed flood protection measures include modifications to sections of the stream courses that would reduce the effects of existing artificial constrictions to increase the channels capacity to carry flood flows through the City.<sup>9</sup> A fee program similar to that for the Pleasant Grove Creek watershed exists for the Dry Creek watershed.

### *Placer County*

The Placer County Flood Control District (PCFCD) formulates regional strategies for flood control management. The PCFCD consists of several communities within the County, including Roseville, Rocklin, and Lincoln.

Sacramento and Sutter Counties have expressed concern that development in the Roseville area and western Placer County may increase flooding problems in their counties. In response, the PCFCD initiated a study and determined that future development would increase the acreage subject to, and the amount and frequency of, flooding. The study initially recommended constructing regional retention facilities for each watershed. PCFCD subsequently investigated the feasibility of the approach and determined that the cost of implementing such a facility may be prohibitive. In addition, consensus between the various governmental agencies in Placer, Sutter, and Sacramento Counties has not been reached regarding what flood control measures would be adequate and feasible. Therefore, the Placer County Board of Supervisors has implemented a flood management strategy that includes:

- providing detention storage for new developments where feasible,
- collecting development fees to purchase or floodproof downstream properties,
- implementing a flood warning system, and
- implementing a floodplain management ordinance.

### **Drainage**

Runoff characteristics of the Plan Area are defined by topography, ground slope, vegetative cover, soil types, and the amount of impermeable surface area. Site topography is relatively flat and generally sloping from east to west. Existing ground cover in the Plan Area is primarily natural, and is comprised of grass, brush, and oak woodlands. Soils in this Plan Area have low infiltration rates except in stream channels. Impermeable paved areas within and immediately adjacent to the Plan Area include Blue Oaks Boulevard, Woodcreek Oaks Boulevard, and Fiddymont Road. Surface water flows primarily towards Pleasant Grove Creek and its tributaries, and Curry Creek on the Neighborhood D (Woodcreek West property).

Plan Area land owners contracted with CH2M Hill to estimate runoff flow rates and volumes for each property under pre-development (existing) conditions. Table 4.4-7 summarizes the results for the 100-year 24-hour storm.

| <b>TABLE 4.4-7</b>                                                               |                                   |                                        |                                            |
|----------------------------------------------------------------------------------|-----------------------------------|----------------------------------------|--------------------------------------------|
| <b>ESTIMATED RUNOFF UNDER EXISTING CONDITIONS</b>                                |                                   |                                        |                                            |
| <b>Property</b>                                                                  | <b>Drainage to Waterway</b>       | <b>24-Hour 10-Year Peak Flow (cfs)</b> | <b>24-Hour 100-Year Volume (acre-feet)</b> |
| Woodcreek North                                                                  | South Branch Pleasant Grove Creek | 320                                    | 58                                         |
| Woodcreek West                                                                   | Curry Creek                       | 320                                    | 60                                         |
|                                                                                  | Dry Creek                         | 120                                    | 24                                         |
|                                                                                  | Kaseberg Creek                    | 185                                    | 36                                         |
| Diamond Creek/Eskaton                                                            | Pleasant Grove Creek              | 480                                    | 85                                         |
| Walaire 160                                                                      | South Branch Pleasant Grove Creek | 110                                    | 20                                         |
|                                                                                  | Pleasant Grove Creek              | 110                                    | 20                                         |
| Mourier 140                                                                      | South Branch Pleasant Grove Creek | 105                                    | 24                                         |
|                                                                                  | Pleasant Grove Creek              | 55                                     | 13                                         |
| NOTE:<br>cfs = cubic feet per second                                             |                                   |                                        |                                            |
| SOURCE: City of Roseville, Final West Roseville Baseline Studies, November 1994. |                                   |                                        |                                            |

### Surface Water Quality

Specific water quality data is not available for Pleasant Grove Creek.<sup>10,11</sup> However, surface water quality can be characterized by surrounding land uses. For example, the Plan Area has been historically used for pasture. Typical constituents in runoff from pasture lands would include nitrogen, phosphorus, and coliform bacteria. Based on past and existing agricultural use in the Plan Area, typical pollutant concentrations in runoff could be estimated to be 3.0 milligrams per liter (mg/l) Total Kjeldahl Nitrogen, 0.3 mg/l phosphate, 0.02 mg/l lead, and 0.05 mg/l zinc.<sup>12</sup>

The City of Roseville does not discharge any wastewater effluent into Pleasant Grove Creek. Surrounding industrial uses (e.g., Hewlett-Packard and NEC), however, could contribute levels of heavy metal, hydrocarbons and other constituents through runoff. For a discussion of existing sources of hazardous materials contamination that could adversely affect the Plan Area, see Chapter 4.8, Hazardous Materials.



## Urban Runoff

Plan Area development would result in the urbanization of currently undeveloped land. There are varied concentrations of pollutants carried in urban runoff. The pollutant concentration of urban runoff is typically highest during the first major rainfall event after the dry season. This event is known as the "first flush." The "first flush" can carry a variety of accumulated pollutants. Oil, grease, heavy metals, sediment, pesticide residues, and fecal coliform bacteria from roadways, parking lots, rooftops, and other surfaces are the primary pollutants in urban runoff. Runoff is most commonly deposited into waterways next to paved surfaces. Pollutant concentrations in urban runoff are extremely variable and are dependent upon storm intensity, land use, elapsed time since the previous storm, and the volume of runoff.

## Groundwater Resources

Roseville is situated over the north central portion of the Central Valley Groundwater Basin which extends from Red Bluff to Bakersfield. Groundwater basins are recharged naturally by infiltration of streamflow that originates in the mountain areas contiguous to the basins and by deep percolation of precipitation. These sources are considered the major contributor to groundwater replenishment. Groundwater in the region, including the Plan Area, contributes to the underlying Sacramento Valley groundwater system below and west of the Plan Area.<sup>13</sup> According to U.S. Geological Survey (USGS) computer model estimates, approximately 1.6 percent of the total natural recharge in the Sacramento Valley basin can be attributed to the Placer County subarea.<sup>14</sup> According to USGS studies, the Bear River recharge subarea located north of the Placer County subarea also contributes some recharge to the Sacramento Valley groundwater basin. The USGS estimates 2.3 percent of the total recharge can be attributed to the Bear River subarea.<sup>15</sup> Thus, the Placer County and Bear River subareas combined represents approximately five percent of total recharge to the Sacramento Valley groundwater basin under natural conditions. This would not be considered significant compared to the contribution from recharge areas in the northern Sacramento Valley, which account for approximately half of all recharge in the Sacramento Valley groundwater basin.<sup>16</sup> Consequently, the Plan Area is not considered a significant recharge source in the context of a regional source.

Some recharge also results from infiltration of excess irrigation water. Only lands with sufficiently permeable soil permit percolation. Soils containing hardpan occupy over half the valley on the east side of the Sacramento River, and these severely restrict downward movement of water. Clayey soils also impede percolation.<sup>17</sup> The rate and quantity of water reaching the saturation zone depends on factors that include the amount and duration of precipitation, soil type, moisture content of the soil, and vertical permeability of the unsaturated zone. A large portion of the Plan Area is comprised of soils that are impermeable or underlain by hardpan. In these areas, infiltration is low, thereby limiting groundwater recharge. Groundwater recharge in the vicinity occurs primarily along major stream channels such as Pleasant Grove Creek and the South Branch of Pleasant Grove Creek. Depth to groundwater in the Plan Area ranges from approximately 30 to 80 feet below the ground surface. The direction of flow is generally to the southwest.



## Groundwater Quality

Comprehensive groundwater quality data has not been gathered for the Roseville area.<sup>18</sup> No data is available to characterize existing groundwater quality in the Plan Area.<sup>19</sup> It is anticipated that information will be collected on groundwater quality during installation of any new wells necessary to serve the Plan Area.<sup>20</sup> Similar to surface water quality, groundwater quality can be characterized by surrounding land uses (see surface water quality discussion above).

### 4.4.3 REGULATORY SETTING

#### Floodplain Regulations

The City of Roseville restricts the placement of fill in floodplains and floodways within the City's jurisdiction. The U.S. Army Corps of Engineers (Corps) regulates the placement of fill or dredge material in waters of the United States (which includes stream courses and jurisdictional wetlands). The Corps regulates these activities under the authority of Section 404 of the Clean Water Act (CWA). The Corps would regulate any development in the Plan Area that would affect jurisdictional wetlands. The California Department of Fish and Game (CDFG) has authority over stream bed and bank alterations within the 100-year floodplain under Sections 1600 through 1603 of the California Fish and Game Code. Please see Chapter 4.5, Biological Resources, for a complete discussion of Corps and CDFG permitting authority.

FEMA oversees the delineation of flood zones and the provision of disaster assistance. FEMA maps floodplains and manages the National Flood Insurance Program (NFIP), which enables property owners within designated flood zones to purchase flood insurance. As part of this program, flood zones are mapped on Flood Insurance Rate Maps (FIRMs). In September of 1990, the City adopted revised FIRMs which cover a small portion of the South Branch of Pleasant Grove Creek.<sup>21</sup>

FEMA maintains restrictions on development in designated floodplains. FEMA requirements for residential development in a designated A Zone include raising the first floor to at or above the base flood elevation (100-year). Requirements for nonresidential structures include: (1) Elevate the lowest floor (including the basement) to at or above the base flood level; (2) together with attendant utility and sanitary facilities, design so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and (3) require that fully enclosed areas below the lowest floor that are subject to flooding be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters.

#### **Drainage**

The PCFCD develops regional strategies for flood control management in Placer County. The PCFCD consists of several municipalities including Roseville, Rocklin, and Lincoln. The PCFCD and Placer County Resource Conservation District provide advice and assistance on floodplain management.

### **Surface Water Quality Regulations**

The State of California Department of Water Resources has water quality standards that are required by Section 303 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The Water Quality Control Plan, or Basin Plan, prepared by the Central Valley Regional Water Quality Control Board (CVRWQCB), has established water quality standards and objectives for the Sacramento River and its tributaries (including the American River, Pleasant Grove Creek, Curry Creek, Dry Creek, and Kaseberg Creek). These standards are in keeping within the State of California standards. In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria are used to establish a standard. Other criteria may be applied from State Water Resources Control Board (SWRCB) documents or from Environmental Protection Agency (EPA) water quality criteria developed under Section 304(a) of the CWA.

Beneficial uses for California's surface waters are designated by the State in Basin Plans for the various regions (or basins) throughout the State. The Roseville area falls within the jurisdiction of the CVRWQCB, and the Basin Plan for the Central Valley Region (Region 5). The Basin Plan's list of water quality-limited surface waters does not include Pleasant Grove Creek, nor does the creek have specified beneficial uses in the Basin Plan. Beneficial uses for the Sacramento River, however, of which Pleasant Grove Creek is a tributary, have been designated by the CVRWQCB. These uses include municipal and domestic supply, agricultural supply, recreation, and aquatic and wildlife habitat.

### **EPA Stormwater Discharge Permitting Regulations**

The CWA prohibits the discharge of pollutants to navigable waters from a point source unless authorized by a NPDES permit. With respect to pollutants in stormwater discharges, the CWA only requires two sizes of municipalities, large (population 250,000 or above) and medium (population 100,000 to 250,000), certain industrial activities, and certain construction activities to obtain permit coverage. Once the City of Roseville's population exceeds 100,000 people, a NPDES permit would be required to regulate stormwater discharges.

The NPDES permit requires the use of Best Management Practices (BMPs). The primary objective of the BMPs is to reduce non-point source pollution into waterways. These practices include structural and source control measures for residential and commercial areas, and BMPs for construction sites. Components of the BMPs include:

- Maintenance of structures and roads,
- Flood control management,
- Comprehensive development plans,
- Erosion control ordinances,
- Inspection and enforcement procedures,
- Educational programs for toxic material and oil control, and
- Reduction of pesticide use.



## **California General Industrial Stormwater Permit**

The SWRCB adopted a General Industrial Stormwater Permit which covers specific industries. The general permit requires industrial dischargers to (1) eliminate illicit discharges of stormwater to stormwater system, (2) develop and implement a stormwater pollution prevention plan (SWPPP), and (3) perform monitoring of discharges to stormwater systems. The SWPPP should include (1) source identification, (2) practices to reduce pollutants, (3) an assessment of potential pollution sources, (4) a materials inventory, (5) a preventive maintenance program, (6) spill prevention and response procedures, (7) general stormwater management practices, (8) employee training, (9) facility inspection, (10) record keeping, and (11) elimination of unpermitted non-stormwater discharges to the industrial stormwater system.

## **California General Construction Activity Stormwater Permit**

Effective October 1, 1992, general stormwater discharge permits are required by the State for stormwater discharges associated with construction activities involving the disturbance of five acres or more. Construction on sites of fewer than five acres requires a permit if part of a larger development or land sale. Landowners are responsible for obtaining and complying with the permits, but may delegate specific duties to developers and contractors by mutual consent.

Permit applicants are required to prepare, and retain at the construction site, a Stormwater Pollution Prevention Plan (SWPPP) which describes the site, erosion and sediment controls, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. Dischargers are also required to inspect construction sites before and after storms to identify stormwater discharge from construction activity, and to identify and implement controls where necessary.

## **City of Roseville General Plan**

The City's General Plan contains the following flood policies:

Channels and tributaries outside the designated 100-year future floodplain may be permitted to be channelized or modified. Generally piping is encouraged for maintenance and public health and safety reasons where it is determined that the ten-year storm event is less than or equal to 200 cfs. All such channelizations, piping and other modifications are subject to the discretionary approval of the City, and may only be approved:

- If the modification to the channel or tributary would not result in any offsite increase in the water surface elevation;
- If the channel or tributary to be modified is determined to have less than significant vegetation, habitat, visual, recreation or other open space value;
- If channelized, created channels would be designed to: (1) provide adequate open space to safely accommodate the 100-year flow; (2) reflect cross sections and contours similar to the natural channel and be unlined; (3) be compatible with the adjacent system and provide transitions as appropriate; (4) be an integral part and amenity to development; and (5) incorporate habitat enhancement, mitigation and other resources; and

- If piped, the 100-year flow would be able to be safely accommodated over land assuming a blocked pipe, and must comply with all other provisions of the City of Roseville Improvement Standards.

#### 4.4.4 IMPACTS

As stated earlier, the impacts of the project are measured against existing conditions, which are primarily undeveloped grasslands, creeks and riparian areas. It should be noted that two of the properties in Phase I, Diamond Creek and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impact analysis does not assume development of these light industrial designations, it can be considered a "worst-case" analysis. That is, if the Proposed Project were compared to developing the Plan Area under existing entitlements, the impacts would be less severe than those identified below.

##### Method of Analysis

Exposure of people or property to flood hazards due to being located in a designated 100-year floodplain has been determined by reviewing existing FIRMs, and additional floodplain mapping completed by Nolte and Associates and project engineers (including CH2M Hill), as updated to include the 1995 event.

Impervious surface coverage and the associated potential impacts (e.g., surface water runoff, groundwater recharge and urban water quality) have been described based on information developed by project engineers, which has been compared to existing conditions to determine if proposed development could result in an increase in surface water runoff over that which currently exists.

As noted in the Setting, site-specific groundwater and surface water quality data are limited; therefore, water quality has been evaluated qualitatively in general terms based on past and present land uses. The effectiveness of State and federal regulations to mitigate identified impacts has been evaluated.

Effects on groundwater recharge are qualitatively evaluated based on site-specific soil conditions and available information pertaining to regional groundwater resources and recharge potential.

It should be noted that mitigation technology and environmental regulatory frameworks are subject to change due to new techniques, methods, laws, and regulations. This could alter the way that impacts are assessed and the measures that are implemented at the time development occurs.



**Standards of Significance**

For the purpose of this EIR, impacts are considered significant if the Proposed Project would:

- Expose people or property to flood hazards by placing them in an area subject to inundation within the 100-year floodplain as defined by FEMA or additional site specific floodplain maps;
- Result in increased rate and amount of surface water runoff over pre-development conditions so that existing drainage capacity is exceeded;
- Increase the volume of runoff enough that off-site flood elevations are raised;
- Substantially interfere with groundwater recharge and reduce available groundwater supply; or
- Substantially degrade surface and/or groundwater quality due to increases in sediments, erosion and urban contaminants generated by construction and/or operation activities.

**PHASE I IMPACTS**

|                               |                                                                                                                                                                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.4-1(A):</b>       | <b>Development located in the designated 100-year floodplain could obstruct flood flows and exacerbate existing localized flooding.</b>                                                                                             |
| <b>SIGNIFICANCE:</b>          | Potentially significant                                                                                                                                                                                                             |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.4-1 (Design and site structures and amenities within park and open space designations to prevent flood flow obstruction, and demonstrate no increase in off-site water surface elevation due to such features) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                                                                                                                               |

Proposed land uses under Phase I consist of residential, commercial, business-professional, public/quasi-public, and parks and open space. Structures such as bathrooms, backstops, fences, and maintenance buildings associated with parks and open space amenities could be constructed within the limits of the designated 100-year floodplain. In addition, an equestrian arena in a small ranch could be located adjacent to the future floodway or floodway fringe in the vicinity of the proposed 60-kilovolt substation in Neighborhood A (Diamond Creek). Such structures could create an obstruction of flood flows which could increase localized flooding, thereby increasing the potential for damage to persons and structures. This is considered a potentially significant impact.

The City of Roseville General Plan contains policies that restrict land uses and development within the 100-year floodplain to prevent exacerbating flooding conditions, and to limit exposure

of residents and structures to potential harm and/or damage. The relevant policies include the following:

- Policy SB-5. Minimize the placement of, and potential for flood damage to, public and emergency facilities, utilities, roadways and other infrastructure.

In addition, General Plan Floodplain Development Regulations allows development within the future floodway or floodway fringe on a case-by-case basis if it can be demonstrated that development would only be limited to the floodway fringe and would not result in any increase in off-site water surface elevation.<sup>22</sup> Implementation of existing General Plan policies and additional mitigation as identified above would reduce impacts associated with increased flood risk due to obstructions within the floodplain or increase in off-site water surface elevations to a less-than-significant level.

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| <b>IMPACT 4.4-2(A):</b>    | <b>Increase in the rate of stormwater runoff.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                             |
| <b>MITIGATION MEASURE:</b> | None required                                     |

Phase I of the Plan Area is undeveloped at present. Buildout of Phase I would increase the amount of impervious surface coverage over that which currently exists. CH2M Hill estimated that impervious surface coverage associated with Phase I development would be 29 percent (Woodcreek North), 41 percent (Diamond Creek/Eskaton), and 46 percent (Mourier 140). This increase in the amount of impervious surface coverage would increase the rate of surface runoff entering Pleasant Grove Creek and its tributaries (see Tables 4.4-3 through 4.4-6). In addition, development and grading would alter the existing runoff patterns and conveyance capacities on the properties. Increased flows and altered drainage patterns could increase the potential for localized and regional flooding on-site and upstream and downstream of the Plan Area.

In June 1994, a study prepared by CH2M Hill to evaluate preliminary detention storage needs for the Plan Area showed the potential for slightly reduced post-development flood flows in Pleasant Grove Creek due to changes in timing of runoff. City of Roseville staff requested more detailed analysis for the Plan Area. In December 1996, a subsequent study was prepared by CH2M Hill to evaluate the changes in flood flow rates from existing to future conditions. Flood flows were evaluated at four locations along Pleasant Grove Creek: (1) at the confluence with the South Branch of Pleasant Grove Creek; (2) about one mile downstream of the confluence; (3) at Brewer Road; and (4) at the downstream end of Pleasant Grove Creek. The Placer County Flood Control and Water Conservation District HEC-1 model for the Cross Canal Watershed was modified to include the Plan Area. A variety of potential storm centerings were studied to evaluate flow charges due to development. The results of the study showed that future 100-year and smaller flood peak flow rates at each location along Pleasant Grove Creek would be slightly reduced due to a change in runoff timing. However, one storm centering resulted in a slight flow increase at Brewer Road, for some of the smaller floods. For example, the maximum flow increase was approximately 40 cfs out of a total flows of approximately 6600 cfs.<sup>23</sup>



The Roseville General Plan includes a policy requiring individual projects to mitigate their contribution of increased flow rates to minimize the potential for increased on- or off-site flooding:

Policy SB-6.      Require new developments to provide mitigation to insure that the cumulative rate of peak runoff is maintained at pre-development levels.

Based on the modelling estimates, it was determined that on-site stormwater detention storage would not be necessary to manage peak flows in Phase I.<sup>24</sup> Therefore, impacts related to the rate of runoff are considered less than significant.

|                            |                                                           |
|----------------------------|-----------------------------------------------------------|
| <b>IMPACT 4.4-3(A):</b>    | <b>Increase in on-site and off-site flood elevations.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                     |
| <b>MITIGATION MEASURE:</b> | None required                                             |

Phase I of the Plan Area is undeveloped at present. Buildout of Phase I would increase the amount of impervious surface coverage over that which currently exists. CH2M Hill estimated that impervious surface coverage associated with Phase I development would be 31 percent (Woodcreek North), 41 percent (Diamond Creek and Eskaton), and 46 percent (Mourier 140). This increase in the amount of impervious surface coverage would increase the volume of surface runoff entering Pleasant Grove Creek and its tributaries (see Tables 4.4-3 through 4.4-6). In addition, development and grading would alter the existing runoff patterns and conveyance capacities on the properties. Increased flows and altered drainage patterns could increase the potential for localized and regional flooding on-site and upstream and downstream of the Plan Area.

Increased flood elevations are of particular concern for Sutter County, which is subject to flooding along the downstream portion of Pleasant Grove Creek. If the Proposed Project could substantially increase the volume of runoff in Pleasant Grove Creek, downstream areas, including Sutter County, would experience more severe flooding.

The PCFCD has evaluated various methods of controlling downstream flooding but has determined that regional retention facilities may not be economically feasible. Other flood-control strategies include flood-proofing downstream development, purchasing flood easements, and/or providing insurance for downstream landowners.<sup>25</sup> Development fees have been identified to pay for implementation of the flood control strategy. The fees would be used by the City until a regional approach for flood control has been identified. If PCFCD and Sutter County agree on a regional strategy, then the City would participate by contributing fees. If no agreement is reached, then the City could use the fees to mitigate the city's share of impact to Pleasant Grove Creek. The regional basin has been tentatively sited just west of Roseville. Studies conducted by the City show that a facility at this location is feasible, the property is available, and the cost would be reasonable enough to be borne by developers.

Phase I of the Proposed Project would create less impervious surface than was assumed for the industrial designations on the Diamond Creek, Eskaton, and Mourier 140 properties when the

regional basin was planned. Therefore, the Phase I contribution to offsite flooding would be fully addressed by any facility or option developed by the City. Further, the Applicant must contribute its fair share in mitigation fees to the City's regional flood control projects. Therefore, this is considered a less-than-significant impact.

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| <b>IMPACT 4.4-4(A):</b>    | <b>Localized alteration of drainage patterns.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                             |
| <b>MITIGATION MEASURE:</b> | None required                                     |

The Applicant proposes to grade the Plan Area for construction of roadways, building pads, and other facilities. Grading of the Plan Area could cause localized alteration of drainage patterns. Altered drainage patterns could increase the potential for localized and regional flooding on-site and upstream and downstream of the Plan Area.

All grading in the Plan Area would be subject to City of Roseville grading and erosion control requirements. Implementation of City of Roseville grading requirements would ensure that drainage impacts would be reduced to a less-than-significant level.

|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| <b>IMPACT 4.4-5(A):</b>    | <b>Interference with groundwater recharge potential.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                    |
| <b>MITIGATION MEASURE:</b> | None required                                            |

Groundwater supply is partly dependent on "recharge" by percolation of rainwater through permeable surfaces. When impermeable surfaces (e.g., houses and roads) are constructed, groundwater recharge can be reduced, thereby reducing stormwater supply even though the Proposed Project would use surface water for domestic supply, it could affect regional groundwater supply by covering recharge areas. As described in the Setting, soils that are impermeable or underlain by hardpan comprise a large portion of the Plan Area. In these areas, infiltration is low, thereby limiting groundwater recharge. Groundwater recharge in the Plan Area occurs primarily along stream channels such as Pleasant Grove Creek, the South Branch of Pleasant Grove Creek, and Curry Creek. These areas of high groundwater recharge potential have been designated as open space and park uses, facilitating recharge potential. Limited impervious surface coverage would be associated with jog, bike or walk trails, and recreational facilities.

Although amounts have not been quantified, recharge would not be significantly affected due to existing soil conditions. Even if greater recharge potential were identified in the Plan Area such that recharge potential could be adversely affected by the creation of impervious surfaces, it is reasonable to assume that the loss, if any, to the Sacramento Valley groundwater basin would not represent a significant reduction in total recharge because natural recharge from the part of Placer County that includes the Plan Area represents less than two percent of the total recharge in the Sacramento Valley groundwater basin. Further, runoff from the new impervious surfaces would be collected and diverted through on-site drainage controls, such as swales, channels or other detention features, and ultimately released downstream. Some infiltration from these features



would occur, provided underlying soils or rock do not impede flow. Assuming detention facilities would be unlined, infiltration would continue, subject to underlying soil and geologic constraints. Water from flows released from the detention facilities to downstream channels could also provide some recharge. In effect, recharge would still occur, but at different locations than under existing conditions. Therefore, the Proposed Project would result in a less-than-significant impact on groundwater recharge potential and would not result in a reduction in available groundwater supply.

**IMPACT 4.4-6(A):**

**Degraded water quality resulting from increased erosion and sedimentation during construction.**

**SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None required

Development of Phase I would involve the construction of structures, roadways, parking lots, and infrastructure, which would require grading, excavation, and other construction-related activities that could cause solid erosion at an accelerated rate during storm events. Sediment from erosion could have adverse effects on Pleasant Grove Creek water quality, such as increased turbidity, which could result in adverse impacts on fish and wildlife habitat, reduced pump life due to abrasion, increased municipal/industrial water treatment costs for turbidity removal, and impaired recreation and aesthetic values.

Another potential source of water quality degradation during construction activities is heavy machinery and other construction equipment. Construction equipment spills could result in the release of polluting constituents, such as heavy metals, oil, grease, and other petroleum hydrocarbons, to Pleasant Grove Creek and other on-site tributaries.

For construction that would disturb five acres or more, contractors would be required by state law to obtain and comply with the State General Construction Activity Stormwater Permit. Compliance with the permit would involve the implementation of Best Management Practices (BMPs). BMPs include schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollution (i.e. straw bales, dikes, silt fences, sediment traps, or similar methods).

Construction projects that would disturb fewer than five acres of land are not required to comply with the permit. In the aggregate, these smaller projects can adversely affect receiving water quality if not managed. However, all contractors would be required to prepare and retain on-site an Erosion Control Plan in accordance with the City of Roseville's Improvement Standards. The plan would include a description of the construction site, time restrictions, erosion and sediment controls to be used, means of waste disposal, control of post-construction sediment and erosion control measures and maintenance responsibilities, landscaping during and after grading, and non-stormwater management controls.

Compliance with the State General Construction Activity Permit and City Improvement Standards would ensure that water quality impacts associated with construction activities would be less than significant.

**IMPACT 4.4-7(A):****Degraded water quality resulting from increased erosion and stormwater runoff.****SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None required

The primary sources of stormwater pollution from urban development include roadways, automobiles, landscaping, industrial activities, non-stormwater connections to the drainage system, accidental spills and illegal dumping. Phase I includes approximately 460 acres of residential uses, 42.1 acres of commercial and business-professional uses, 38.3 acres of schools, and 160.7 acres of parks and open space. It is anticipated that runoff from Phase I would be typical of urban runoff water quality for the identified uses. Runoff from residential, and commercial uses (including roadway and parking lot areas) generally contains levels of oil, grease, and heavy metals. Runoff from landscaped areas and recreational fields (residential, school, and park uses) could contain high concentrations of nutrients, i.e. fertilizers and pesticides. Open space uses would not be expected to contribute high levels of urban contaminants because they would remain in a relatively undeveloped state (similar to pre-development conditions). Typical pollutants in urban runoff for similar land uses is presented in Table 4.4-8

**TABLE 4.4-8**

**TYPICAL CONCENTRATIONS OF NON-POINT SOURCE  
POLLUTANTS IN STORMWATER**

| Land Use                                                                                   | Typical Non-Point Source Pollutant<br>(pounds per acre/year of runoff) |                  |                  |                |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------|------------------|----------------|
|                                                                                            | Biological<br>Oxygen Demand<br>(BOD <sub>5</sub> )                     | Suspended Solids | Total Phosphorus | Total Nitrogen |
| Residential                                                                                | 24                                                                     | 545              | 0.32             | 4.0            |
| Commercial                                                                                 | 98                                                                     | 745              | 0.75             | 9.0            |
| Recreation                                                                                 | 1.3                                                                    | 420              | 0.06 to 0.2      | 2.3 to 4.4     |
| Cropland, pasture<br>and unused rural land                                                 | 2.1 to 30                                                              | 420 to 10,000    | 0.09 to 0.64     | 0.9 to 23      |
| SOURCE: City of Roseville, Del Webb Specific Plan Draft Environmental Impact Report, 1993. |                                                                        |                  |                  |                |

As stated in the Setting and in the Method of Analysis sections, specific receiving water quality data is not available for Pleasant Grove Creek; therefore, a quantitative comparison of pre-development versus project operation water quality effects is not possible. Project-generated contaminants that could be present in urban stormwater runoff, as described above, could incrementally contribute to contaminants that may be present in Pleasant Grove Creek, which could adversely affect surface water quality. It is unlikely, however, that the NRSP's contribution would result in a violation of water quality objectives or substantially degrade water quality,



because of regulatory requirements and the implementation of several water-quality protection measures, which are described in greater detail below.

The reduction of stormwater discharge pollutants to the maximum extent practicable (MEP) through the use of BMPs is the primary objective of the water quality regulations, including the municipal stormwater permit program, and the Basin Plan as described in the setting. Implementation of BMPs would help meet any stormwater discharge water quality requirements imposed on the City in the future.

Consistent with the General Plan, development of the Plan Area would incorporate a system to control post-construction stormwater pollution. Both non-structural and structural Best Management Practices would be implemented in individual subdivision maps to assure effective water quality control. Structural measures would include procedures such as perimeter controls, diversion channels, sedimentation collection systems, and soil stabilization. The incorporation of additional curb inlets would reduce total pollutant loads of the first flush. Another practice would maximize the use of source controls such as grassy swales, which would convey runoff at non-erosive locations to either a stabilized channel, or directly into BMP facility (e.g., constructed wetland). In addition, the Proposed Project would comply with the State General Municipal Stormwater Permit (when small municipalities require coverage) and applicable permit requirements the EPA establishes as part of the municipal stormwater permit program for small municipalities, or any other applicable state or federal stormwater quality requirements, to manage urban stormwater runoff.

Implementation of General Plan policies and applicable federal and State water quality protection regulations would ensure that water quality impacts associated with urban development would be less than significant.

## **FULL PROJECT IMPACTS**

The following section discusses impacts associated with development of the Full Project. All Phase I development impacts apply to the Full Project development scenario, and the reader is referred to Phase I impact discussions as appropriate.

### **IMPACT 4.4-1(B):**

**Development located in the designated 100-year floodplain could obstruct flood flows and exacerbate existing localized flooding.**

### **SIGNIFICANCE:**

Potentially significant

### **MITIGATION MEASURE:**

Mitigation Measure 4.4-1 (Design and site structures and amenities within parks and open space designations to prevent flood flow obstruction, and demonstrate no increase in off-site water surface elevations due to such features)

### **RESIDUAL SIGNIFICANCE:**

Less than significant

A total of 302 acres of parks and open space would be developed under the Full Project including 141.3 acres in Phase II. The significance of impacts associated with flood risk due to obstructions and development within the future floodway or floodway fringe is the same as previously described for Phase I. The reader is referred to the discussion of Impact 4.4-1(A).

With implementation of Mitigation Measure 4.4-1, Full Project impacts would be less than significant.

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| <b>IMPACT 4.4-2(B):</b>    | <b>Increase in the rate of stormwater runoff.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                             |
| <b>MITIGATION MEASURE:</b> | None required                                     |

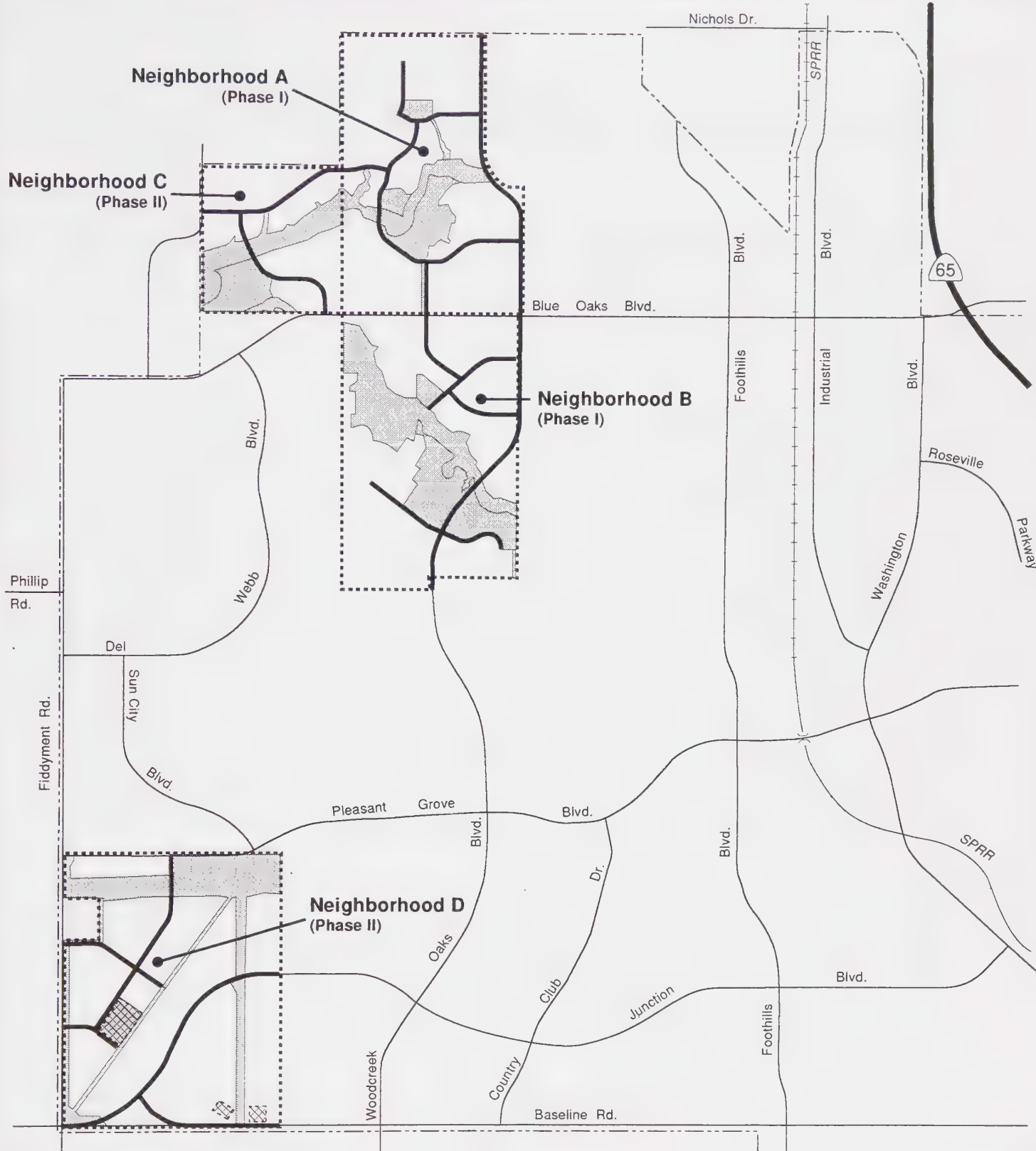
Properties associated with Phases I and II of the Plan Area are undeveloped at present. Buildout of the Full Project would increase the amount of impervious surface coverage over that which currently exists. CH2M Hill estimated that impervious surface coverage associated with Phase I development would be 31 percent (Woodcreek North), 41 percent (Diamond Creek and Eskaton), 46 percent (Mourier 140), 30 percent (Walaire 160), and 38 percent (Woodcreek West). This increase in the amount of impervious surface coverage would increase the rate and amount of surface runoff entering the Pleasant Grove Creek and Dry Creek Watersheds (see Tables 4.4-3 through 4.4-6).

As with Phase I, development and grading would alter the existing runoff patterns and conveyance capacities on the properties. Increased flows and altered drainage patterns could increase the potential for localized and regional flooding on-site and upstream and downstream of the Plan Area.

As discussed in Impact 4.4-2(A), no on-site detention facilities would be necessary to manage peak flow rates associated with Phase I. The Walaire 160 (Neighborhood D) property, adjacent to Phase I, would not require detention facilities for the same reasons (see Impact 4.4-2(A)). However, on-site detention may be necessary for the Woodcreek West property. CH2M Hill proposed that individual detention basins of varying size be located in the parks and park preserves within this area. The detention facilities have been preliminarily sized to detain post-development flows to pre-development levels as a means of mitigating the project's contribution to increased creek flows so as to not exacerbate on- and off-site flooding. Based on more recent studies for Phase I, detention may not be needed for the Pleasant Grove watershed (including the Kaseberg watershed). Although the design and location of detention basins for each of the properties associated with development in the Woodcreek West property has not yet been determined, detention basins are preliminarily proposed to be located near the downstream end of development. Multiple smaller basins may be required depending on how final grading routes the drainage.<sup>26</sup> Figure 4.4-5 identifies preliminary potential locations within the properties proposed for development that may be chosen for detention. As stated above, the number, size and location of the facilities has not been determined.







- |                                                       |                                             |
|-------------------------------------------------------|---------------------------------------------|
| ..... Neighborhood Boundary Within Specific Plan Area | Preliminary Potential Detention Basin Sites |
| ----- Roseville City Limits                           | ----- Streamcourses                         |
| —— Existing and Approved Roads                        | Open Space                                  |
| —— Proposed Roads                                     |                                             |

**Figure 4.4-5**

**Preliminary Potential Detention Basin Sites**

0 1/4 1/2  
Scale In Miles



96063  
Base



SOURCE: CH2MHILL, EIP Associates, May 1997.



With implementation of proposed drainage facilities and General Plan policies, impacts associated with increased surface water flows under the Full Project would be reduced to a less-than-significant level.

|                               |                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------|
| <b>IMPACT 4.4-3(B):</b>       | <b>Increase in on-site and off-site flood elevations.</b>                                |
| <b>SIGNIFICANCE:</b>          | Potentially significant                                                                  |
| <b>MITIGATION MEASURE:</b>    | 4.4-2 (Ensure that regional retention facilities are adequate to contain runoff volumes) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                    |

The Full Project proposes to develop 1,389.9 acres, of which 653.6 acres are in Phase II. Properties associated with Phases I and II of the Plan Area are undeveloped at present. Buildout of the Full Project would increase the amount of impervious surface coverage over that which currently exists, and the level that was assumed when the City's retention basin (discussed under Impact 4.4-3(A)) was sized. CH2M Hill estimated that impervious surface coverage associated with Full Project development would be 31 percent (Woodcreek North), 41 percent (Diamond Creek and Eskaton), 46 percent (Mourier 140), 29 percent (Walaire 160), and 39 percent (Woodcreek West). This increase in the amount of impervious surface coverage would increase the rate and amount of surface runoff entering the Pleasant Grove Creek and Dry Creek Watersheds (see Tables 4.4-3 through 4.4-6). A study prepared in 1993 concluded that all planned future development in Placer County, if unmitigated, could increase flows by less than 0.3 foot along tributary streams and approximately 0.1 foot in the ponding area upstream of the Cross Canal. These increases would inundate several hundred additional acres in Sutter County during a major flood.<sup>27</sup> The Proposed Project would contribute only a small portion of these increases in flood elevation. Nonetheless, because greater development would occur than was planned, and additional streams and tributaries could be affected (e.g., Curry Creek, Dry Creek Watershed), potential effects related increased on-site and off-site flood elevations would be potentially significant.

As stated under Impact 4.4-3 (A), the Applicant must contribute toward a regional flood control strategy. Mitigation Measure 4.4-2 requires that the Applicant demonstrate that the City's regional facility is adequate, or can be redesigned to be adequate, to accommodate the net increase in runoff generated by the Full Project. This measure would reduce the Full Project contribution to flood elevations to a less-than-significant level.

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| <b>IMPACT 4.4-4(B):</b>    | <b>Localized alteration of drainage patterns.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                             |
| <b>MITIGATION MEASURE:</b> | None required                                     |

Although greater development would occur under the Full Project, and additional streams and tributaries could be affected (e.g., Curry Creek, Dry Creek Watershed), potential effects related to alteration of drainage patterns would be the same as those identified for Phase I. The reader is referred to the discussion of Impact 4.4-4(A).



|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| <b>IMPACT 4.4-5(B):</b>    | <b>Interference with groundwater recharge potential.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                    |
| <b>MITIGATION MEASURE:</b> | None required                                            |

Although greater development would occur under the Full Project, this would not significantly affect groundwater recharge potential. Areas of greatest recharge occur primarily along stream channels, which are designated as parks and open space under both Phase I and Phase II (Full Project). Such areas would not be highly developed with impervious surfaces. The significance of impacts associated with groundwater recharge is the same as previously described for Phase I. The reader is referred to the discussion of Impact 4.4-5(A).

|                            |                                                                                                       |
|----------------------------|-------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.4-6(B):</b>    | <b>Degraded water quality resulting from increased erosion and sedimentation during construction.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                                 |
| <b>MITIGATION MEASURE:</b> | None required                                                                                         |

Although greater development would occur under the Full Project and additional streams and tributaries could be affected (e.g., Curry Creek, Dry Creek Watershed), construction-related water quality effects and control measures would be the same as those identified for Phase I. The reader is referred to the discussion of Impact 4.4-6(A).

|                            |                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------|
| <b>IMPACT 4.4-7(B):</b>    | <b>Degraded water quality resulting from increased erosion and stormwater runoff.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                 |
| <b>MITIGATION MEASURE:</b> | None required                                                                         |

Although greater development would occur under the Full Project and additional streams and tributaries could be affected (e.g., Curry Creek, Dry Creek Watershed), potential water quality effects and urban runoff control measures would be the same as those identified for Phase I. The reader is referred to the discussion of Impact 4.4-7(A).

#### **4.4.5 MITIGATION MEASURES**

##### **DEVELOPMENT IN FLOODPLAIN AREAS**

**Mitigation Measure 4.4-1: Design and site structures and amenities within parks and open space designations to prevent flood flow obstruction, and demonstrate no increase in off-site water surface elevations due to such features.**

Mitigation Measure 4.4-1 applies to Impacts 4.4-1 (A) and (B).

Structures and amenities associated with anticipated uses within areas of the Parks and Open Space land use designations that are included in the 100-year floodplain shall be designed and

sited to ensure that such features do not obstruct flood flows, do not create a public safety hazard, or result in any increase in off-site water surface elevations. Recreational amenities such as picnic tables and backstops shall be designed, placed, and securely fastened to allow for water to easily flow through or around them and so that they do not become dislodged during flood events. Fences, if any, shall be sized, placed, and securely anchored to minimize the potential for floodwaters to flow towards unprotected areas or areas not within the floodplain. Permanent features such as restroom facilities shall be constructed in accordance with applicable requirements and situated where they will not exacerbate flooding.

#### **RUNOFF VOLUMES**

##### **Mitigation Measure 4.4-2: Ensure that regional retention facilities are adequate to contain runoff volumes.**

Mitigation Measure 4.4-2 applies to Impact 4.4-3 (B).

Prior to development of the Woodcreek West, the Applicant shall demonstrate, through the preparation of technical engineering studies, that increased storm runoff from the Plan Area will not exceed the capacity of the planned regional stormwater retention facility. The results of the study shall be submitted to the City of Roseville Public Works Department for review and concurrence.

TABLE 4.4-9

**HYDROLOGY AND WATER QUALITY RESIDUAL IMPACT SUMMARY TABLE**

| <b>Impact</b>                                                                                                                                   | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|
| 4.4-1(A and B) Development located in the designated 100-year floodplain could obstruct flood flows and exacerbate existing localized flooding. | Less than significant  | Less than significant       |
| 4.4-2(A and B) Increase in the rate of stormwater runoff.                                                                                       | Less than significant  | Less than significant       |
| 4.4-3(A and B) Increase in on-site and off-site flood elevations.                                                                               | Less than significant  | Less than significant       |
| 4.4-4(A and B) Localized alteration of drainage patterns.                                                                                       | Less than significant  | Less than significant       |
| 4.4-5(A and B) Interference with groundwater recharge potential.                                                                                | Less than significant  | Less than significant       |
| 4.4-6(A and B) Degraded water quality resulting from increased erosion and sedimentation during construction.                                   | Less than significant  | Less than significant       |
| 4.4-7(A and B) Degraded water quality resulting from increased erosion and stormwater runoff.                                                   | Less than significant  | Less than significant       |

## ENDNOTES

1. City of Roseville, *Comprehensive Land Use Element Update Project Draft Environmental Impact Report*, February 1995, page 4.4-2.
2. Rich Briner, KB Engineering, Surveying, and Planning, memo to Brian Boxer, EIP Associates, June 15, 1995.
3. City of Roseville, *Final West Roseville Baseline Studies*, November 1994, page 6-2.
4. City of Roseville, *Final West Roseville Baseline Studies*, November 1994, page 6-5.
5. City of Roseville, *Final West Roseville Baseline Studies*, November 1994, pages 6-6 through 6-8.
6. City of Roseville, *Comprehensive Land Use Update Project Draft Environmental Impact Report*, February 1995, page 4.4-3.
7. Aqua Resources, Inc., *City of Roseville Northwest Specific Plan Drainage Plan Summary Report*, May 1990.
8. Garth Gaylord, Associate Civil Engineer, City of Roseville Public Works Department, personal communication, December 11, 1996.
9. City of Roseville, *Comprehensive Land Use Element Update Project Draft Environmental Impact Report*, February 1995, page 4.4-3.
10. Nela Stewart, Environmental Coordinator, City of Roseville Community Development Department, personal communication, June 12, 1995.
11. City of Roseville, *Highland Reserve North Draft Environmental Impact Report*, October 1996, p. 3.9-3.
12. City of Roseville, *Del Webb Specific Plan Draft Environmental Impact Report*, September 1993, page 14-7.
13. Placer County, *Placer County General Plan Update Draft General Plan Update Background Report, Volume II*, September 1992, p. 6-15.
14. California Department of Water Resources, *Evaluation of Ground Water Resources: Sacramento Valley*, Bulletin 118-6, August 1978, Figure 6A and Table 2, pp. 114 through 117.
15. California Department of Water Resources, *Evaluation of Ground Water Resources: Sacramento Valley*, Bulletin 118-6, August 1978, Figure 6A and Table 2, pp. 114 through 117.



16. California Department of Water Resources, *Evaluation of Ground Water Resources: Sacramento Valley*, Bulletin 118-6, August 1978, Figure 6A and Table 2, pp. 114 through 117.
17. California Department of Water Resources, *Evaluation of Ground Water Resources: Sacramento Valley*, Bulletin 118-6, August 1978, p. 67.
18. City of Roseville, *Comprehensive Land Use Element Update Project Draft Environmental Impact Report*, page 4.4-4, February 1995.
19. City of Roseville, *Final West Roseville Baseline Studies*, November 1994, page 6-9.
20. City of Roseville, *Final West Roseville Baseline Studies*, November 1994, page 6-9.
21. City of Roseville, *Del Webb Specific Plan Draft Environmental Impact Report*, September 1993, page 14-8.
22. City of Roseville, Resolution 93-307, General Plan Floodplain Policy Clarification, Floodplain Development Regulation #2.
23. CH2M Hill, "North Roseville Specific Plan, Draft Summary - Pleasant Grove Creek Flood Flows," draft memorandum from Loren Bottoroff to Stephen Des Jardins, December 8, 1996.
24. CH2M Hill, "North Roseville Specific Plan, Draft Summary - Pleasant Grove Creek Flood Flows," draft memorandum from Loren Bottoroff to Stephen Des Jardins, December 8, 1996.
25. Placer County Flood Control District, "Policies and Strategies for Mitigating the Impacts of New Development on Lower Cross Canal Watershed Flooding", July 8, 1996.
26. CH2M Hill, Memorandum to the File, *West Roseville Group Preliminary Detention Storage Sizing Draft Summary*, June 28, 1994.

---

---

## ***4.5 BIOLOGICAL RESOURCES***

---

---



---

## 4.5 BIOLOGICAL RESOURCES

---

### 4.5.1 INTRODUCTION

Implementation of the proposed North Roseville Specific Plan would substantially change the biologic environment in the Plan Area. The Plan Area is particularly rich in riparian oak woodland, which is a valuable and limited habitat in the region, and contains approximately 22 acres of seasonal wetlands and vernal pools. The Applicant proposes to preserve approximately 85 percent of the oak riparian habitat, which would reduce impacts; however, substantial grassland habitat would be converted to urban development.

The environmental setting was based on a review of numerous environmental documents for the general area<sup>1</sup> and biological studies of specific parcels within the Plan Area.<sup>2</sup> In addition, two brief reconnaissance-level surveys of the Plan Area to supplement more extensive field surveys undertaken and presented in documents cited in this section. Finally, consultations with staff of natural resource regulatory agencies were conducted. Special-status species were determined from previous documents of the Plan Area and nearby lands, the California Natural Diversity Database, California Native Plant Society Electronic Inventory, as well as documents in EIP Associates' proprietary files.

Both Phase I and Phase II (Full Project) are evaluated using the site's current existing conditions as the baseline to provide a "worst-case" scenario.

### 4.5.2 ENVIRONMENTAL SETTING

The Plan Area is on the eastern edge of the Great Central Valley province, on the western slopes of the foothills of the Sierra Nevada. Dominant habitats comprise annual grassland, blue oak/mixed oak woodland, and wetlands (see Figure 4.5-1, Existing Habitats in Plan Area). Jurisdictional wetlands in the Plan Area include Pleasant Grove Creek (PGC) and the South Branch of Pleasant Grove Creek (SBPGC), two small artificial marshes, intermittent creeks, seasonal wetlands and vernal pools. The estimated area of each habitat is listed in Table 4.5-1, and described below.<sup>3</sup> Detailed maps of wetland areas are provided in Appendix E.

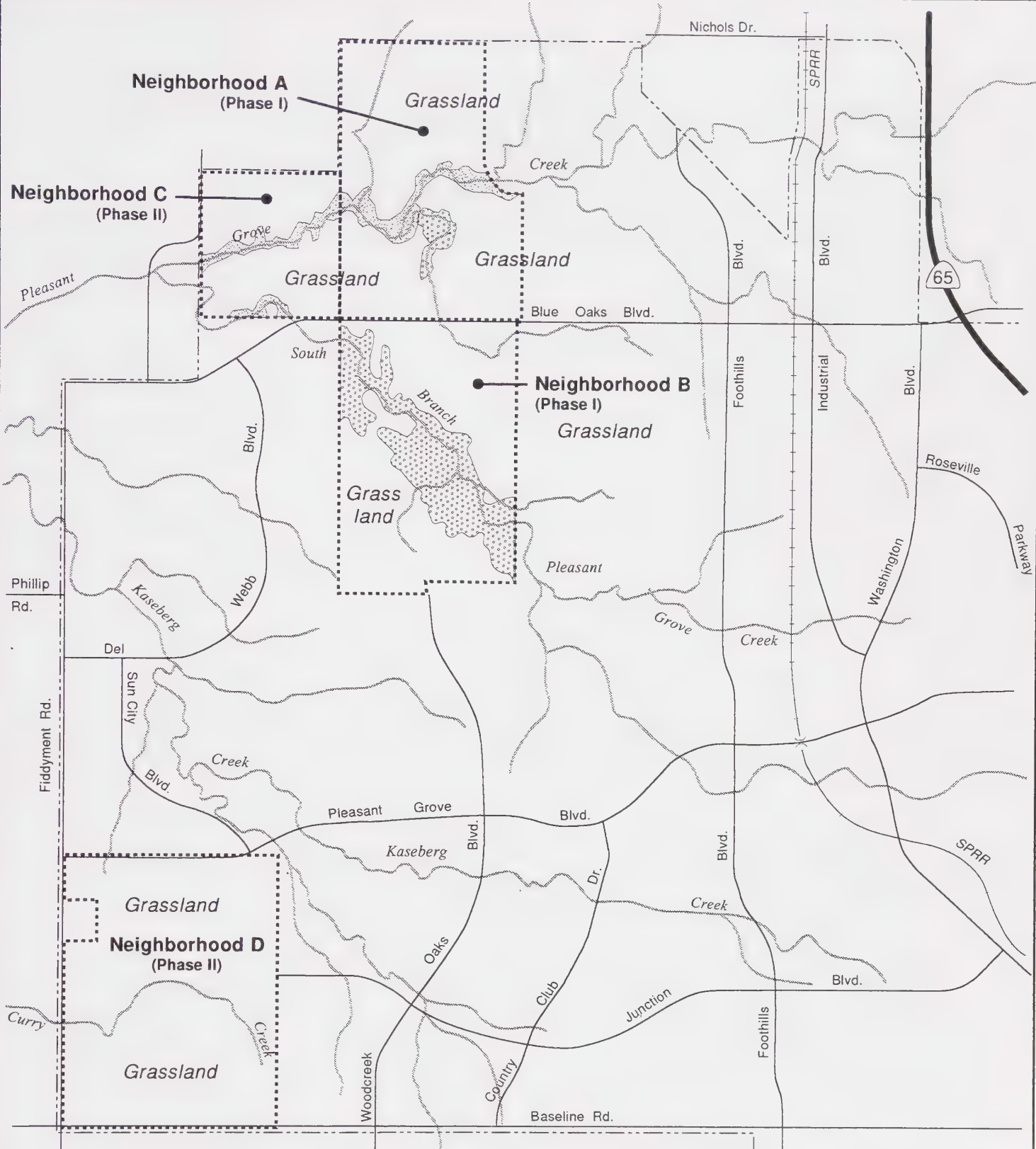
#### Terrestrial Habitats

##### Annual Grassland

Annual grassland habitat is characterized by annual grasses and forbs. Dominant species in the Plan Area include hairgrass (*Aira caryophylla*), soft chess (*Bromus hordeaceus*), rip-gut brome (*Bromus diandrus*), wild oat (*Avena fatua*), Mediterranean barley (*Hordeum marinum*), perennial







- Neighborhood Boundary Within Specific Plan Area
- - - - - Roseville City Limits
- Existing and Approved Roads
- ~~~~~ Streamcourses/Creeks
- ▨ Mixed Oak Woodland
- ▤ Blue Oak Woodland

**Figure 4.5-1**

**Approximate Location  
Of Habitats In  
Plan Area**

0      1/4      1/2

Scale In Miles

N

96063  
Base

SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996;  
EIP Associates, May 1997.



**TABLE 4.5-1**  
**EXISTING HABITATS IN THE PLAN AREA**

| Habitat               | Estimated Acreages |
|-----------------------|--------------------|
| Annual Grassland      | 1,259.30           |
| Blue Oak Woodlands    | 98.40              |
| Vernal Pools          | 3.56               |
| Seasonal Wetlands     | 4.33               |
| Intermittent Drainage | 2.54               |
| Drainage Swale        | 1.24               |
| Pleasant Grove Creek  | 9.20               |
| Wetlands Preserve     |                    |
| Blue Oaks Woodlands   | 2.20               |
| Annual Grasslands     | 5.50               |
| Vernal Pool           | 0.70               |
| Perennial Marsh       | 1.03               |
| Seasonal Marsh        | 1.35               |

SOURCE: Sugnet & Associates, 1997

ryegrass (*Lolium perenne*), medusahead grass (*Taeniatherum caput-medusae*), red stem filaree (*Erodium botrys*), true clovers (*Trifolium* spp.), and bur clover (*Medicago polymorpha*). Other common species include fiddle-neck (*Amsinckia menziesii*), blue dicks (*Dichelostemma capitatum*), spikeweed (*Hemizonia fitchii*), and vinegar weed (*Trichostema lanceolatum*).

Many wildlife species use annual grassland habitat for all or part of their life cycle, but some require special habitat features, such as cliffs, caves, ponds, or habitats with woody plants, for breeding, resting, and escape cover. Reptiles that could occur include western fence lizard (*Sceloporus occidentalis*) and yellow-bellied racer (*Coluber constrictor*). Mammals typically found in annual grassland habitat include California vole (*Microtus californicus*), deer mouse (*Peromyscus maniculatus*), Botta's pocket gopher (*Thomomys bottae*), black-tailed hare (*Lepus californicus*), California ground squirrel (*Spermophilis beecheyi*), and coyote (*Canis latrans*). Typical birds include western meadowlark (*Sturnella neglecta*), western kingbird (*Tyrannus verticalis*), and Brewer's blackbird (*Euphagus cyanocephalus*). Rodent populations provide foraging opportunities for birds-of-prey such as white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), and great horned owl (*Bubo virginianus*).



Several special-status species use grassland during at least part of their life cycles. In general, tiger salamanders and western spadefoot breed in vernal pools, but retreat to uplands near vernal pools (generally grasslands) for the remainder of the year. Northern harriers forage and sometimes nest in grassland habitat.

### Blue Oak/Mixed Oak Woodland

Blue oak woodland is dominated by blue oak (*Quercus douglasii*), but includes small amounts of interior live oak (*Quercus wislizenii*), and some valley oak (*Q. lobata*). Blue oak woodland is distinguished from mixed oak woodland, in that the former consists of approximately 85% or more blue oak, and the latter is a more or less evenly mixed among the three species. Blue oaks occur in a continuous strip along south branch Pleasant Grove Creek, and as single trees in an oak savannah setting. Mixed oak occurs primarily along main branch Pleasant Grove Creek.<sup>4</sup> The understory of both types is typically annual grassland, including wild oat, soft brome, Mediterranean barley, blue dicks and filaree.

Blue oak and mixed oak occur in a riparian setting on the Plan Area, and some previous reports have described this as oak riparian forest<sup>5</sup> or riparian woodland.<sup>6</sup> Riparian forests as described by Mayer & Laudenslayer (1988) contain a high percentage of non-oak species, including willow (*Salix spp.*), Fremont cottonwood (*Populus fremontii*), and white alder (*Alnus rhombifolia*), as well as a dense understory of shrubs such as blackberry (*Rubus spp.*), wild rose (*Rosa californica*), and poison oak (*Toxicodendron diversiloba*). Reconnaissance level field surveys indicated the woodland associated with the riparian corridor in the Plan Area appears to be almost exclusively oak; therefore, it is identified as blue oak/mixed oak woodland. The distinction between the two is significant because blue oaks are somewhat less common than the other two species, but as habitat the two types are similar.

The complex structure, abundance of food, shade and nesting sites make oak woodlands attractive to mammals such as Brazilian free-tailed bat (*Tadarida brasiliensis*) and western gray squirrel (*Sciurus griseus*), as well as birds such as acorn and Nuttall's woodpeckers (*Melanerpes formicivorus*, *Picoides nuttalli*), scrub jays (*Aphelocoma coerulescens*), yellow-billed magpie (*Pica nuttalli*), and many warblers and flycatchers.

Cavities in oak trees are important nesting sites for American kestrel (*Falco sparverius*), tree swallows (*Tachycineta bicolor*), plain titmouse (*Parus inornatus*), wrens, and western bluebirds (*Sialia mexicana*) and provide nesting platforms for red-tailed hawks, white tailed kites or occasional Cooper's hawks (*Accipiter cooperii*).

Large oak trees in close proximity to grassland foraging areas and water can be attractive to nesting Swainson's hawks (*Buteo swainsoni*), although there are no confirmed records of this species nesting in the Plan Area. Great blue herons and egrets are known to roost in oak woodlands where they also occur in close association with water.

## **Wetlands**

### **Intermittent Creeks**

The Plan Area is crossed by the main and south branches of Pleasant Grove Creek, which originates east of the Plan Area, and joins the Sacramento River northwest of the City of Sacramento. Historically, the Creek flowed with winter rainfall, and was probably dry or nearly so during the summer. With additional runoff from urban and industrial sources, the Creek has a tendency to be more perennial, but may occasionally be dry or run below the surface. It frequently exists as a series of small pools intermittently connected by small flowing channels.

The Creek is not known to contain anadromous fishes,<sup>7</sup> but supports mosquitofish, and potentially some warm water fish species. Mallards (*Anas platyrhynchos*), wood duck (*Aix sponsa*), great egret (*Casmerodius albus*), great blue heron (*Ardea herodias*), and belted kingfisher (*Ceryle alcyon*) use these areas to feed on algae, crayfish, pacific treefrogs (*Hyla regilla*), western toad (*Bufo boreas*) and bullfrogs (*Rana catesbeiana*). Mammals such as raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*) could also forage there.

In addition to the branches of Pleasant Grove Creek, there are small swales and drainages throughout the Plan Area that could carry water briefly during winter rainfall. These areas are not creeks per se, but soils beneath them could be saturated for a longer period than adjacent upland areas, and thus support a wetland floral community. They are distinct from vernal pools, but fall within the US Army Corps of Engineers (USCOE) definition of jurisdictional waters of the U.S. Wildlife uses of these areas are similar to those of annual grassland.

### **Marshes and Ponds**

One small marshy area is found on the Woodcreek North property, which is part of the Phase I project. This marsh and reservoir was built as part of a wetland mitigation program for the Northwest Roseville Specific Plan Area in 1990. Although the wetland is of relatively recent construction, it is developing cattails and a marshy edge consistent with high value wetland habitat.

### **Vernal Pools and Seasonal Wetlands**

Vernal pools are ephemeral wetlands that form in shallow depressions underlain by a substrate near the surface that restricts the percolation of water. These depressions fill with rainwater during the fall and winter and can remain inundated until spring or early summer, sometimes filling and emptying numerous times during the rainy season.<sup>8</sup> Vernal pools are generally recognized by a flowering community dominated by characteristic wetland plants. Wetland species within the Plan Area include winged water-starwort (*Callitriche marginata*), annual hairgrass (*Deschampsia danthonioides*), Solano downingia (*Downingia ornatissima*), Vasey's coyote thistle (*Eryngium vaseyi*), bractless hedge-hyssop (*Gratiola ebracteata*), hyssop loosestrife (*Lolium hyssopifolium*), slender popcorn flower (*Plagiobothrys stipitatus*), spine-fruit butter-cup (*Ranunculus bonariensis*), and purslane speedwell (*Veronica peregrina*).<sup>9</sup>



Seasonal wetlands are distinguished from vernal pools in that they contain a greater abundance of facultative and grassy species, and may not be inundated for as long as vernal pools. The distinction between the two types is often unclear; the final determination of the type of wetland can often be dependent upon the verification of the USCOE. The extent to which special-status plant and animal species can use these habitats is variable, but, conservatively, any species present in vernal pools could be present in seasonal wetlands.

#### Wetland Delineations and Permits

Wetland delineations were conducted according to the USCOE 1987 Manual<sup>10</sup> for some portions of the Plan Area during May 1992, August and December 1993, and April 1994.

Currently, wetland delineations for Diamond Creek and Eskaton sites have been verified by the USCOE, and Diamond Creek has received authorization to fill 4.14 acres. The Mourier 140 property has been authorized under Nationwide 26 permit. The Woodcreek North and Woodcreek West delineations were verified by the USCOE in July 1995. The Walaire wetland delineation is pending USCOE verification. Figures showing the specific areas of wetlands are included in Appendix E. The areas of delineated wetlands are summarized in Table 4.5-2.

| <b>TABLE 4.5-2</b>                                         |                           |                             |                                                                                                                                                                                            |                      |
|------------------------------------------------------------|---------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>STATUS OF WETLAND DELINEATIONS AND PERMIT PROCESSES</b> |                           |                             |                                                                                                                                                                                            |                      |
| <b>Property</b>                                            | <b>Total Area (acres)</b> | <b>Wetland Area (acres)</b> | <b>Comments</b>                                                                                                                                                                            | <b>Date Verified</b> |
| Woodcreek West                                             | 492.6                     | 2.24                        | Combined into "Woodcreek-North Roseville" and fill of 3.94 acres authorized under Nationwide 26 on 1/17/97. 401 certification dated 1/13/97. Section 7 consultation with USFWS is ongoing. | July 24, 1995        |
| Woodcreek North                                            | 232.9                     | 2.96                        | See above.                                                                                                                                                                                 | July 12, 1995        |
| Walaire 160                                                | 161                       | 2-7                         | Pending Verification                                                                                                                                                                       |                      |
| Mourier 140                                                | 140.5                     | 4.09                        | 2.56 acres of fill authorized under Nationwide 26.                                                                                                                                         | September 19, 1994   |
| Diamond Creek/Eskaton                                      | 362.9                     | 8.93                        | Authorized to fill 4.14 acres under Nationwide 26. 401 received 8/21/94.                                                                                                                   | May 24, 1994         |
| <b>TOTAL</b>                                               | <b>1,389.9</b>            | <b>20.22 to 25.22</b>       |                                                                                                                                                                                            |                      |
| SOURCE: Sugnet & Associates, 1994, 1995, and 1997.         |                           |                             |                                                                                                                                                                                            |                      |

## **Special-Status Species**

For the purposes of this section, special-status species include those that are listed as rare, threatened, or endangered by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service; most species that are candidates for either state or federal listing; species designated as "fully protected" or "species of special concern" by CDFG; and some other species that are tracked by the California Natural Diversity Data Base or California Native Plant Society, but do not fall into any of the categories cited above. Only species that are listed as threatened or endangered require mitigation under the State and Federal Endangered Species Acts. Other special-status species are considered both as indicators of overall diversity and ecological conditions, because they can be considered "rare" under the definition presented in Section 15380 of the CEQA Guidelines.

### **Plants**

No special-status plant species have been observed in the Plan Area. Several federal or State-listed plant species could occur in the habitats found in the Plan Area, although surveys conducted during April and May 1994 detected none.<sup>11</sup> State and federal listed species that could occur in the Plan Area are briefly described below.

Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*). Status: CNPS 1B. Big-scale balsamroot can be found in flower March through June. This composite occurs in the Central Valley and ranges to the San Francisco Bay Area on dry slopes and valley grasslands. Suitable habitat is present on Plan Area.

Hispid bird's beak (*Cordylanthus mollis* var. *hispidus*). Status: CNPS 1B. Hispid bird's beak inhabits alkaline meadows and playas, blooming June through September. It is known from Solano, Merced, and Kern Counties.<sup>12</sup> It is unlikely that suitable habitat occurs within the Plan Area.<sup>13</sup>

Dwarf downingia (*Downingia pusilla*). Status: CNPS 1B. The dwarf downingia grows in vernal pools and is known from the San Francisco Bay Area, Central Valley and possibly elsewhere. Flowering occurs March through May. Habitat suitable for dwarf downingia occurs within the Plan Area.

Bogg's Lake Hedge hyssop (*Gratiola heterosepala*). Status: State-listed endangered, CNPS 1B. *Gratiola heterosepala* can be found in vernal pools and on lake margins. Blooming period is from April through June. It occurs in the Sacramento Valley, the Sierra foothills, and ranges to the Modoc Plateau. Suitable habitat occurs in the Plan Area.

Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*). Status: CNPS 1B. Ahart's dwarf rush grows in vernal pools and is known from only five occurrences in Butte and Calaveras Counties. It flowers from March through May. There is suitable habitat in the Plan Area for this plant.

Legenere (*Legenere limosa*). Status: CNPS 1B. Legenere flowers May through June. Legenere typically occurs in deep seasonal wetlands, such as vernal pools, seasonal swales, and ephemeral



drainages that contain water for long periods during spring. Under these wet conditions, *legenere* forms dense mats. *Legenere* has become restricted in distribution as a result of habitat conversion and associated disturbance (e.g. degradation of wetland hydrology through plowing, grading, or grazing). *Legenere* is known to occur sporadically from Red Bluff in the north to Merced County in the south. Suitable habitat is present in the Plan Area.

Pincushion navarettia (*Navarettia myersii*). Status: CNPS 1B. Pincushion navarettia inhabits vernal pools and flowers in May. There are four known occurrences,<sup>14</sup> which are from Sacramento, Amador, and Merced Counties. Suitable habitat is present in the Plan Area.

Sacramento Orcutt grass (*Orcuttia viscida*). Status: Federal endangered, State-listed endangered, CNPS 1B. Sacramento County has seven known locations of this Orcutt grass. It blooms May through June in vernal pools and the Plan Area has suitable habitat to find this plant.

Slender orcutt grass (*Orcuttia tenuis*). Status: Federal threatened, State-listed endangered, CNPS 1B. Slender orcutt grass grows in vernal pools and flowers from May through July. This grass could be found in the Plan Area.

Sanford's arrowhead (*Sagittaria sanfordii*). Status: CNPS list 1B. Sanford's arrowhead is a tuberous, perennial herb of fresh emergent wetlands that occurs in marshes and swamps throughout the Central Valley and North Coast Range (CNPS), and blooms May through August. Potential habitat is found within the creek and marshes in the Plan Area.

### **Threatened and Endangered Animals**

Special-status animal species that could occur in the Plan Area are shown in Table 4.5-3. Of these, the only species with federal or State-listed status are the vernal pool fairy shrimp, valley elderberry beetle, and Swainson's hawk. Vernal pool fairy shrimp and Swainson's hawk have been observed in the Plan Area.

#### Invertebrates

Vernal Pool Fairy Shrimp (*Branchinecta lynchi*). Status: Federal threatened. Fairy shrimp are small (11 to 27 mm) crustaceans adapted to survive the annual flooding and drying of vernal pools. They grow for about two weeks, breed, and produce eggs that are dropped to the silty bottom of the pool. As the vernal pool dries, the adults die. The "resting" eggs are protected by thick outer coverings that resist cold, heat, and desiccation during the summer months.

The US Fish and Wildlife Service (USFWS) determined the vernal pool fairy shrimp to be threatened under the Federal Endangered Species Act in September 19, 1994 (59 FR 48136). Vernal pool fairy shrimp occur commonly in vernal pools in the Roseville area, and have been found in both natural and constructed vernal pools in the Plan Area and surrounding vicinity.<sup>15</sup>

Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). Status: Federal threatened. The valley elderberry beetle (VELB) is listed as a threatened species with known critical habitat designated in parts of Solano, Yolo (Putah Creek), and Sacramento counties. It

TABLE 4.5-3

## SPECIAL-STATUS ANIMAL SPECIES OBSERVED IN THE NORTH ROSEVILLE AREA

| Common Name              | Scientific Name <sup>1</sup> | Status <sup>2</sup><br>(Fed/CA/CNPS) | Season <sup>3</sup> | Primary Habitat <sup>4</sup>                     | Present on Site <sup>5</sup> | Comments                          |
|--------------------------|------------------------------|--------------------------------------|---------------------|--------------------------------------------------|------------------------------|-----------------------------------|
| INVERTEBRATES            |                              |                                      |                     |                                                  |                              |                                   |
| Vernal pool fairy shrimp | <i>Branchinecta lynchi</i>   | T/--                                 | Resident            | Vernal pool                                      | O                            | Occurs in vernal pools and swales |
| BIRDS                    |                              |                                      |                     |                                                  |                              |                                   |
| White-tailed kite        | <i>Elanus leucurus</i>       | (Nesting)                            | Resident            | Woodland/grassland/marshes                       | O                            | Forages in grasslands             |
| Northern harrier         | <i>Circus cyaneus</i>        | --/CSC                               | Resident            | Nests in freshwater marsh; forages in grasslands | O                            | Forages in grasslands             |
| Cooper's hawk            | <i>Accipiter cooperi</i>     | --/CSC (Nesting)                     | Resident            | Woodland habitats                                | O                            | Seen in area, no nests found      |
| Swainson's hawk          | <i>Buteo swainsoni</i>       | --/T                                 | Summer              | Nests in riparian trees; forages in open fields  | O                            | Seen in area, no nests found      |
| Loggerhead shrike        | <i>Lanius ludovicianus</i>   | --/CSC                               | Resident            | Various open habitats                            | O                            | Present in area                   |

TABLE 4.5-3

## SPECIAL-STATUS ANIMAL SPECIES OBSERVED IN THE NORTH ROSEVILLE AREA

| Common Name | Scientific Name <sup>1</sup> | Status <sup>2</sup><br>(Fed/CA/CNPS) | Season <sup>3</sup> | Primary Habitat <sup>4</sup> | Present on Site <sup>5</sup> | Comments |
|-------------|------------------------------|--------------------------------------|---------------------|------------------------------|------------------------------|----------|
|-------------|------------------------------|--------------------------------------|---------------------|------------------------------|------------------------------|----------|

NOTES:

<sup>1</sup>Scientific names are based on the following sources: AOU 1986, Jennings 1983, Hickman 1993, Zeiner *et al.* 1990.

<sup>2</sup>Status = Status of species relative to the Federal and California State Endangered Species Acts and Fish and Game Code.

Fed = Federal status.

E = Federally listed as endangered.

T = Federally listed as threatened.

PE = Proposed endangered.

PT = Proposed threatened.

C = Candidate species comprise taxa for which the USFWS currently has substantial information on hand to support the biological appropriateness of proposing to list as endangered or threatened. Proposed rules have not yet been issued because they have been precluded at present by other listing activity.

CA = California status.

E = Species whose continued existence in California is jeopardized.

T = Species that although not presently threatened in California with extinction, is likely to become endangered in the foreseeable future.

CSC = California Department of Fish and Game "Species of Special Concern". Species with declining populations in California.

FP = Fully protected against take pursuant to the Fish and Game Code.

-- = No California or federal status.

CNPS = California Native Plant Society Listing (does not apply to wildlife species).

1B = Plants, rare, threatened or endangered in California and elsewhere and are rare throughout their range. All of the plants constituting List 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection) of the California Department of Bald Eagle Protection Act and Fish and Game Code Sec. 3503.3 and are eligible for state listing.

3 = Plants about which we need more information-a review list. List 3 is an assemblage of taxa that have been transferred from other lists or that have been suggested for consideration. Information that would allow an assignment to one of the other lists or to reject them is lacking.

4 = Plants of limited distribution-a watch list. Plants in this category are of limited distribution in California and their vulnerability or susceptibility to threat appears low at this time. However, they are uncommon enough that their status should be monitored regularly.

<sup>3</sup>Season = Blooming period for plants. Season of use for animals.

<sup>4</sup>Primary habitat = Most likely habitat association.

<sup>5</sup>Present on site:

O = Observed onsite.

R = Recorded onsite.

S = Suitable habitat onsite.

U = Unsuitable habitat onsite.

SOURCE: California Dept. of Fish and Game, *California Natural Diversity Database*, 1995; California Native Plant Society, *Electronic Inventory of Rare and Endangered Vascular Plants of California*, March 1994, US Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants. Federal Register February 28, 1996.



occurs at very low density, over a wide geographic area. The beetle feeds and reproduces on an obligate host, the elderberry shrub (*Sambucus spp.*). Since its recognition as a threatened species in 1980, its geographic range has been considerably expanded as biologists have discovered new populations. Survey guidelines indicate that the beetle may occur nearly anywhere that elderberry plants are found below 2,000 feet. An elderberry shrub was reported on the Diamond Creek portion of the Plan Area.<sup>16</sup>

### Birds

Swainson's Hawk (*Buteo swainsoni*). Status: State threatened. Swainson's hawk is listed as a State "threatened" species. This finding was based on the sharp reduction in riparian woodlands and forests experienced over the state in the last 100 years, and the consequent reduction in Swainson's hawks which use riparian woodlands for nesting. Swainson hawks are open country birds, which forage in grasslands and agricultural fields, foraging over grasslands, and in agricultural fields, especially after disking or harvest. Swainson hawks can forage as much as 20 miles from the nest, and observations of Swainson hawks in the Plan Area vicinity are not uncommon, but the nearest known nest site for Swainson's hawks is far to the west of the project (more than 5 miles). Suitable nesting and foraging habitat is present in the Plan Area. Sugnet & Associates (1994a) reported:

The rezone study area was surveyed by a qualified avian biologist on May 20, 1994. On this day, the entire rezone study area was surveyed for raptor nests. Each nest was examined for evidence of activity; ...but no active Swainson's hawks nests were found. Three juvenile Swainson's hawks were observed on one occasion circling over the northern portion of the study area. The juveniles were probably attracted to the area because of adjacent land use practices (i.e. disking, plowing) on the property to the west and north of the study area. No active disking occurs within the rezone study area.

Two Swainson's hawks were observed on the Diamond Creek property during reconnaissance level surveys for this EIR on April 21, and June 9, 1995. In April, two birds were observed perched and circling low over riparian oaks near the center of the Walaire 140 property. In June, two birds were again observed in this area, one of which brought a prey item into the oak woodland at the same location where the two were previously observed. No active nest was found, but a suitable nesting site was located. Although there are no recent records of Swainson's hawks nesting in this area, these observations suggest that these birds may be nesting in the Plan Area.

### **Other Special-Status Animals**

The following species are not listed as threatened or endangered species by the federal or State governments, but require analysis because they are fully-protected species under State or federal laws or regulations, or because they are species for which there is evidence that they could meet the definition of rare contained in Section 15380 of the CEQA Guidelines. Candidate species (those which are being evaluated for eligibility for listing under state or federal endangered species laws) are included because, due to their status, they could be elevated to State or federal endangered or threatened status prior to completion of the development of the Proposed Project.



Prairie Falcon (*Falco mexicanus*) is a "fully protected" raptor and State Species of Special Concern. Prairie falcons occur as fall and winter migrants in the project area, and feed on small birds, and rodents in annual grasslands, pastures, and ruderal vegetation. A prairie falcon was observed foraging on the Mourier 140 property in November 1996.<sup>17</sup>

White-tailed Kite (*Elanus leucurus*) is a "fully protected" raptor in California. Black-shouldered kites feed on rodents, small reptiles, and large insects in fresh emergent wetlands, annual grasslands, pastures, and ruderal vegetation. They breed between February and October. Unlike other raptors, kites often roost, and occasionally nest, communally; therefore, disturbance of a relatively small roost or nesting area could affect a large number of birds. White tail kites have been observed foraging in the Plan Area, and at least one nest has been observed.

Cooper's Hawk (*Accipiter cooperii*) is a State Species of Special Concern. Cooper's hawks breed between March and August. Usually they nest and forage in woodlands or riparian vegetation near water. This species has not been observed in the Plan Area; however, suitable habitat for this species exists along the riparian corridors in the Plan Area.

Mountain Plover (*Charadrius montanus*) and Long-billed curlew (*Numenius americanus*) are both State Species of Special Concern. These species occur as winter migrants in the region, foraging on insects in grasslands, pastures and disced fields. Suitable foraging habitat for these species occurs in the Plan Area; although, none was reported from field surveys.<sup>18</sup>

Burrowing Owl (*Speotyto cunicularia*) is a State Species of Special Concern and a "fully-protected" raptor. It is also federally protected under the Migratory Bird Treaty Act (Federal Law 16 USC 703-711). Burrowing owls forage in open habitats for insects, mice, and small birds. They breed between March and August and frequently nest in ground squirrel burrows in berms along paved roads, dirt roads, and channels, and in ruderal vegetation or annual grassland. This species has not been recorded in the Plan Area, but may be present.

Long-eared Owl (*Asio otus*), a State Species of Special Concern, can forage within the region during winter. Long-eared owls forage in open habitats for small mammals and birds. They Plan Area, but suitable habitat exists within patches of riparian habitat.

Northern Harrier (*Circus cyaneus*) is a State Species of Special Concern. Northern harriers breed between April and September and nest on the ground in shrubby vegetation. They hunt in annual grasslands, pastures, fresh emergent wetlands, and some croplands. Suitable foraging and potential nesting habitat for this species occurs in the Plan Area and they are frequently observed foraging there.

Sharp-Shinned Hawk (*Accipiter striatus*), a State Species of Special Concern, can forage within the region during the winter. Within the general region, Sharp-shinned hawks forage in open habitats and roost in woodlands. This species has not been observed within the Plan Area. However, potential foraging and roosting habitat for this species exists throughout the riparian and grassland vegetation of the Plan Area.

Short-Eared Owl (*Asio flammeus*) is a State Species of Special Concern. Short-eared owls primarily forage for small mammals in open habitats. They breed between March and July and nest on the ground. This species does not nest in the Central Valley, but could occur here during the winter. This species has not been observed within the Plan Area. However, potential habitat for this species exists in grassland in the Plan Area.

Loggerhead shrike (*Lanius ludovicianus*) is a State Species of Special Concern. Loggerhead shrikes occur in woodland and chaparral habitats throughout California. They feed primarily on insects or small rodents, which they hunt from grasslands adjacent to woodland areas. The shrike is also called "butcher bird" for its habit of impaling its prey on cactus thorns or barbed wire fences. Suitable foraging and nesting habitat occurs in the Plan Area, although the species has not been reported in field surveys.

California Tiger Salamander (*Ambystoma californiense*) is a State Species of Special Concern and federal candidate for listing. Tiger salamanders occurs in the Central Valley and adjacent foothills.<sup>19</sup> They breed in vernal pools and seasonal wetlands, and spend summer months in abandoned ground squirrel burrows in grassland and upland habitats. The nearest known population occurs near the northern border of Yolo County.<sup>20</sup> Potential habitat occurs in the Plan Area, but none were detected during field surveys.<sup>21</sup>

Western spadefoot toad (*Scaphiopus hammondi*) is a State Species of Special Concern. Western spadefoot breed and lay eggs in vernal pools and seasonal wetlands throughout the Central Valley. After pools dry, the adults move into burrows in adjacent grassland and woodland areas. Potential habitat occurs in the Plan Area, but none were detected during field surveys.<sup>22</sup>

Northwestern Pond Turtle (*Clemmys marmorata*) is a State Species of Special Concern. Western pond turtle occurs in ponds and slow streams throughout western California, and requires a reliable source of water. Most aquatic habitat in the Plan Area is reported to be intermittent, which would be unsuitable. However, the artificial ponds and Pleasant Grove Creek are potential habitat in the Plan Area. None was detected during field surveys.<sup>23</sup>

### 4.5.3 REGULATORY SETTING

#### Federal Waterway and Wetland Regulations

Section 404 of the Clean Water Act (1972) prohibits filling jurisdictional waters of the U.S. without a permit issued by the USCOE under a Memorandum of Understanding with the Environmental Protection Agency. Most waters of the United States are defined by list (e.g., lakes, ponds, rivers) and the limits of jurisdiction determined at the ordinary high water level. Fills may be permitted by the issuance of an Individual Permit. Fills of less than one acre can be permitted without notification if they comply with the provisions of one or more general permits. The EPA Section 404 (b)(1) guidelines for the evaluation of mitigation and compensation proposals include the stipulation that avoidance of fills is the most preferred mitigation, followed by on-site compensation, then off-site compensation. Compensation ratios may be 1:1 or higher.



### **U.S. Fish and Wildlife Service**

The United States Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), the Bald and Golden Eagle Protection Act (16 USC Section 668), and the Federal Endangered Species Act (FESA, 16 USC § 153 *et seq*). Projects that would result in adverse affects on any federally listed threatened or endangered species are required to consult with and mitigate through consultation with the USFWS. This consultation can be pursuant to either Section 7 or Section 10 of the Endangered Species Act, depending on the magnitude of involvement by the federal government. The objective of consultation under the Endangered Species Act is to determine whether the project would jeopardize a protected species, and what mitigation measures would be required to avoid jeopardizing the species.

"Take" under federal definition currently includes actions that involve harming or harassing a protected species, or "such acts as may include significant habitat modification or degradation" (50 CFR §17.3). Species that are identified as candidates for listing do not have the full protection of Endangered Species Act; however, the USFWS advises project applicants that a candidate species could be elevated to listed status at any time. For this reason, federal candidate species are addressed with special consideration in this document.

### **California Department of Fish and Game**

The California Department of Fish and Game (CDFG) derives its authority from the Fish and Game Code of California. Species listed under the California Endangered Species Act (Fish and Game Code Section 2050 *et seq*) cannot be "taken" without adequate mitigation and compensation. At present, "take" means to hunt, pursue, catch, capture, or kill, or to attempt to do so. It should be noted that at this time, based on the most recent findings of the California Attorney General's Office, "take" does not prohibit indirect harm by way of habitat modification.<sup>24</sup> CDFG may implement endangered species protection by entering management agreements ("Section 2081 management agreements") with project proponents.

Fish and Game Code Section 3511 describes bird species, primarily raptors, which are "fully protected." Fully protected birds may not be taken or possessed except under specific permit. Section 3503.5 of the code protects all birds-of prey and their eggs and nests.

Species of Special Concern (CSC) is a category conferred by CDFG for those species which are considered to be indicators of regional habitat changes, or are considered to be potential future protected species. Species of Special Concern do not have any special legal status, but are intended by CDFG for use as a management tool to take these species into special consideration when decisions are made concerning the future of any land parcel.

California Public Resources Code Section 15380, defines "rare" in a broader sense than the definitions of threatened, endangered or species of special concern. Guidelines issued by the Director of CDFG state that plants in CNPS 1B fulfill the criteria of "rare" under PRC 15380, and should be included in environmental impact reports and mitigation. CDFG guidelines do not carry the obligations of law or regulation, but CDFG views this policy as a means to avoid project delays in addressing species issues of which the applicant was not formerly notified.

CDFG can request additional consideration of species not otherwise protected under this definition.

Sections 1601 through 1607 of the California Fish and Game Code prohibit alterations of any streams, including intermittent and seasonal channels and many artificial channels, without a permit from CDFG. The limit of CDFG jurisdiction is, subject to the judgment of the Department, up to the 100-year flood level. This would apply to any channel modifications that would be required to meet drainage, transportation or flood-control objectives of the project.

### **California Environmental Quality Act (CEQA)**

California Public Resources Code Section 15380, defines "rare" in a broad sense that includes species other than those designated as State or federally threatened or endangered. On this basis, plants designated as "rare" by non-regulatory organizations (e.g. CNPS), Species of Special Concern (CDFG), former Category 1 and 2 species (USFWS)<sup>25</sup> and other designations may be the focus of agency concerns and citizen intervention.

### **City of Roseville Zoning Ordinance - Tree Preservation Chapter (Chapter 19.66)**

This ordinance protects native oak trees six inches or more in diameter at breast height (dbh) and specified landmark trees. The ordinance requires a permit for any activity which would harm, destroy, kill or remove any protected tree. In addition to removal, grading (cut or fill) and trenching within the dripline are subject to permit approval.

### **City of Roseville General Plan Policies**

The City of Roseville has adopted policies to preserve the value of biological resources in the community. These policies are specific to vegetation and wildlife; however, other policies intended to preserve water quality, air quality and other features also benefit and protect biological resources. The City's General Plan policies are listed in Appendix C of this Draft EIR.

## **4.5.4 IMPACTS**

The impacts of the Proposed Project are measured against existing conditions, which are primarily undeveloped grasslands, creeks and riparian areas. It should be noted that two of the properties in Phase I, Diamond Creek and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impact analysis does not compare project impacts to development of these light industrial designations, it can be considered a "worst-case" analysis. That is, if the Proposed Project were compared to developing the Plan Area under existing entitlements, the impacts would be less severe than those identified below.

### **Method of Analysis**

The biological resources evaluation consists of review of available literature on biological resources (including special-status plants, wildlife and habitats) in the general vicinity, informal



consultations with agency representatives and experts knowledgeable about the local area, and reconnaissance-level field surveys to confirm the conclusions of existing documentation. Special-status plants have been identified from a review of existing reports, as well as a search of the California Native Plant Society Electronic Inventory for habitats in the vicinity. Wildlife species have been identified from the substantial literature documenting past field surveys, as well as a review of the current California Natural Diversity Database (Rarefind) for the project vicinity. Habitat classifications are consistent with the California Department of Fish and Game Wildlife Habitat Relationship (WHR) System. Jurisdictional wetlands have been identified based on wetland delineations prepared for property owners in the Plan Area (both verified and those pending).

The biological setting of the Plan Area has been described in terms of vegetation and plant communities, including wildlife habitat, fisheries and special-status species. Special-status plant and wildlife species that could occur in the Plan Area have been provided, as well as a description of the likelihood of encountering them in the Plan Area. Figure 4.5-1 shows specific habitat areas of concern.

Jurisdictional wetlands and riparian habitats have been shown on habitat maps in Appendix E, as they are reported in the existing documentation. Wetland delineations that have been verified by the Corps have been noted, and those for which verification is absent or pending have been noted. Wetland mitigation, where implemented, has been summarized and, as relevant, included in the discussion of mitigation measures.

Where existing data have been determined to be incomplete, or insufficient to determine if descriptions and mitigation are complete, reconnaissance-level field surveys have been made to provide additional information on occurrence and distribution of special-status species and habitats. These surveys are intended to verify and supplement existing information.

The Plan Area has been evaluated with regard to the presence and location of valuable biological resources before and after implementation of the NRSP. Areas set aside for mitigation or open space have been evaluated for their potential to adequately preserve or maintain the most significant biological resource values of the area. Resources that could be reduced or lost as a result of NRSP implementation have been identified, and recommendations for additional mitigation if necessary to preserve those resources, are provided.

Residential development would substantially replace natural biological communities with landscape and garden biological communities. Both residential and non-residential areas proposed for the Plan Area have been evaluated for their potential impact on adjacent open space and preserve areas intended to preserve biological resource values.

The impact analysis also assumes implementation of General Plan policies and City Improvement Standards before determining the level of significance. Therefore, City policies and standards are not presented as mitigation.

**Standards of Significance**

Impacts on biological resources are considered significant if one or more of the following conditions could result from implementation of the NRSP:

- Violation of State or federal endangered species regulations, including "take" or for a population of a State or federally-listed threatened or endangered species;
- Substantial reduction in numbers, restriction of range, or loss of habitat for a population of special-status species, including fully protected, candidate for listing, proposed for threatened or endangered, and species considered "rare" under CEQA 15380 by CDFG;
- Substantial interference with the movement of any resident or migratory fish or wildlife species;
- Substantially diminished or reduced habitat for native fish, wildlife, or plants;
- Disturbance of wetlands, marshes, riparian woodlands and other wildlife habitat; or
- Violation of the Tree Preservation chapter of the Roseville Zoning Ordinance, including damage, removal or encroachment into the protected zone of native oak trees greater than 6 inches in diameter at breast height (DBH).

**PHASE I IMPACTS**

|                               |                                                          |
|-------------------------------|----------------------------------------------------------|
| <b>IMPACT 4.5-1(A):</b>       | <b>Loss of oak trees of greater than 6" dbh.</b>         |
| <b>SIGNIFICANCE:</b>          | Short-term significant, long-term, less than significant |
| <b>MITIGATION MEASURE:</b>    | None identified                                          |
| <b>RESIDUAL SIGNIFICANCE:</b> | Short-term significant, long-term, less than significant |

Oak trees are a highly important biological resource because they support a diverse community of insects and wildlife in both their overstory (branches and leaves) and in their understory (grasses, brush, and limbs on the ground under the tree). Oak woodlands have been reduced in California to an extent that the loss of any oak trees must be considered a substantial loss of habitat for a number of native wildlife. The City of Roseville has recognized the importance of the preservation and enhancement of oak woodlands by implementing the Tree Preservation Chapter of the Roseville Zoning Ordinance, which requires the replacement of, or payment of an in-lieu fee for the removal of, oak trees. Because oak trees take a relatively long time to reach a large size (> 100 years) it is nearly impossible to replace the biological habitat value of a mature oak tree by planting numerous small, young oak saplings. An old oak tree provides much better habitat than an equivalent (by trunk diameter) number of young oaks.



The Applicant proposes to minimize losses of oak trees by preserving approximately 69.20 acres of oak woodland in open space preserves in Phase I, out of a total of 81.8 acres. This policy of avoidance would preserve the major stands of oak woodlands in the Plan Area, with tree loss occurring primarily on the fringes of the oak woodlands and with isolated trees. Oak trees would also be removed during construction of roadways and other infrastructure. Loss of trees is expressed in the aggregate diameter at breast height of trees to be removed (in inches). For example, Woodcreek Oaks Boulevard is expected to result in the removal of approximately 284 inches of oak trees on the Woodcreek North and Diamond Creek properties. A second road (Collector B) on the Diamond Creek property would result in the loss of approximately 242 inches. Construction of sewer lines could also require the loss of a small amount of trees. Prior to the removal of any oak trees, the Applicant must obtain a tree permit from the City, which will include provisions for replacing lost trees. Even with the implementation of the City's Tree Preservation regulations, short-term adverse effects of tree loss would not be fully mitigated until the replacement trees reach maturity. The loss of large oak trees is considered a significant impact. With implementation of the City's Tree Preservation regulations, the long-term impact would be less than significant.

|                             |                                                         |
|-----------------------------|---------------------------------------------------------|
| <b>IMPACT 4.5-2(A):</b>     | <b>Loss of oak woodland and mixed riparian habitat.</b> |
| <b>SIGNIFICANCE:</b>        | Less than significant                                   |
| <b>MITIGATION MEASURES:</b> | None required                                           |

Riparian woodlands support the greatest diversity and variety of wildlife of any habitat type in California. Riparian areas have been reduced by as much as 95% due to urbanization, agriculture, lumber, firewood extraction and flood control. Remaining habitat areas are therefore especially valuable. The majority (85 percent) of the riparian/oak woodland habitat in Phase I would be preserved through implementation of the proposed land use plan which places Pleasant Grove Creek and the South Branch of Pleasant Grove Creek, and portions of their major tributaries, in open space. Impacts on the riparian corridors would occur where creek crossings are required for Plan Area roadways and pedestrian/bicycle bridges, and where the trail system would result in loss of habitat in the riparian corridors and the urban/open space interface.

The urban/open space boundary tends to place a majority of oak woodlands in open space; however, there are locations along the boundary where groups of trees would be on the "urban" side, making them vulnerable to long-term loss.

The NRSP indicates that Woodcreek Oaks Boulevard would cross Pleasant Grove Creek in Neighborhood A (Diamond Creek) and the South Branch of Pleasant Grove Creek in Neighborhood B (Mourier 140 and Woodcreek North); in addition, another street and two pedestrian crossings would be constructed in the Pleasant Grove Creek corridor, as well as a pedestrian crossing of the South Branch of Pleasant Grove Creek. The loss of riparian habitat estimated to be caused by each of these crossings is described in Table 4.5-4.

The greatest potential area of disturbance is the network of pedestrian trails, winding through the riparian corridor and the urban/open space interface (see Table 4.5-4). The pedestrian trails could

**TABLE 4.5-4**

**POTENTIAL RIPARIAN LOSSES DUE TO ROADS AND TRAILS  
FOR PHASE I AND FULL PROJECT**

| <b>Creek Crossings and Other Habitat Loss</b>                       | <b>Size</b>   | <b>Square Feet</b> | <b>Acres</b> |
|---------------------------------------------------------------------|---------------|--------------------|--------------|
| <b>Phase I</b>                                                      |               |                    |              |
| <b>Pleasant Grove Creek</b>                                         |               |                    |              |
| Diamond Creek Street                                                | 100' x 200'   | 20,000             | 0.45         |
| Diamond Creek Park Pedestrian/Bicycle Bridge (west)                 | 25' x 300'    | 7,500              | 0.2          |
| Diamond Creek Park Pedestrian/Bicycle Bridge (east)                 | 25' x 300'    | 7,500              | 0.2          |
| Woodcreek Blvd                                                      | 146' x 400'   | 58,400             | 1.3          |
| <b>South Branch of Pleasant Grove Creek</b>                         |               |                    |              |
| Woodcreek Blvd                                                      | 146' x 400'   | 58,400             | 1.3          |
| Pleasant Grove Creek Park/Commons Park<br>Pedestrian/Bicycle Bridge | 25' x 300'    | 7,500              | 0.2          |
| <b>Trail System</b>                                                 |               |                    |              |
| Pedestrian Trails                                                   | 10' x 23,750' | 237,600            | 5.5          |
| <b>PHASE I TOTAL</b>                                                |               |                    | <b>9.15</b>  |
| <b>Phase II</b>                                                     |               |                    |              |
| Walaire 160 Street                                                  | 100' x 100'   | 10,000             | 0.2          |
| <b>FULL PROJECT TOTAL</b>                                           |               |                    | <b>9.17</b>  |
| SOURCE: David Wade Associates, 1995,1996, EIP Associates, 1996.     |               |                    |              |



result in the loss of up to 5.5 acres of riparian habitat, although the affected acreage is likely to be less, because the trails could be designed to follow routes that have the least amount of riparian habitat.

In each of these areas, construction and operation of the roads, pedestrian crossings and trails, and the urban/open space interface would affect vegetation and wildlife in the riparian corridor. A certain number of trees and other riparian vegetation would be removed, as discussed in Impact 4.5-1(A), above. Roads and trails would be paved and access to the area would be improved, resulting in greater disturbance to wildlife. Construction activities would also adversely affect the riparian corridor through indirect construction activity (e.g., off road parking, vehicle travel). Construction within the corridor would cause some vegetation removal and cause erosion or channel changes that would affect the stream.

The Proposed Project would also require water and sewer lines and collectors be constructed in the Plan Area. In general, these pipelines are to be sited under and adjacent to planned roads. However, in some areas one or more sewer or water lines would need to cross the oak woodland and riparian corridors. Typical design would require a pumping station be constructed in the vicinity of the riparian crossing. Construction of the pipeline crossings and pump station would result in a small, but undetermined area of lost riparian habitat.

The implementation of Section 1600 Streambed Alteration Agreements and Best Management Practices are intended to minimize adverse impacts as a result of construction and sources of erosion. However, the direct removal of vegetation and long term disturbance could not be avoided. Within the overall Plan Area, the floodway and riparian corridors would be protected from vegetation removal and excessive disturbance to wildlife. These protected areas would regenerate additional vegetation and develop increasing biological value as a result of being protected. Therefore, the relatively small area of riparian habitat removed by the proposed riparian crossings and pedestrian trail system would be less than significant.

|                               |                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-3(A):</b>       | <b>Loss of vernal pools, seasonal wetlands and other jurisdictional waters of the U.S.</b>                                   |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                  |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.5-1 (Preserve and construct vernal pools or purchase credits from an approved wetlands mitigation bank) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Potentially significant                                                                                                      |

Phase I of the Proposed Project would result in fill of up to approximately 5.77 acres of vernal pools, seasonal wetlands, swales and intermittent drainages. Wetland delineations based on the methodology approved by the USCOE have been prepared for Neighborhood A (Diamond Creek/Eskaton) and Neighborhood B (Woodcreek North and Mourier 140) properties.

The landowners have proposed that all wetland impacts would be mitigated through implementation and compliance with the provisions of the Section 404 permit for wetland fill.

Permits for fill of wetlands and implementation of appropriate mitigation have been completed on the four Phase I properties.

For Neighborhood A (Diamond Creek/Eskaton property), mitigation consisted of onsite wetland avoidance and preservation, and offsite mitigation at the Wildlands wetland mitigation bank, near Sheridan, California, to compensate for the fill of approximately 4.04 acres of wetlands. The seedbank of onsite vernal pools and swales to be filled was salvaged by scraping the top 6 inches of soil, stockpiling it, and transporting it for inoculation to the mitigation area. Because a federally-threatened species was known to occur in vernal pools in this area (vernal pool fairy shrimp), the mitigation site and methods required the approval of the USFWS. The landowner paid a fee to the wetland mitigation bank operated by Wildlands, Incorporated, which will be used to construct, manage and monitor an area of vernal pools of equivalent or greater area than that filled due to development.

For Neighborhood B (Mourier 140 and Woodcreek North), delineations have been prepared and a Nationwide 26 Permit and 401 certification have been issued, but mitigation has not yet been implemented. Section 7 consultation with USFWS is underway.

It cannot be stated at this time what mitigation would be agreed upon between the remaining landowners, the USCOE and the USFWS; however, current policy requires that the ratio of mitigation to impact be not less than 1:1. It is anticipated that compliance with the requirements of these two agencies would minimize adverse impacts due to loss of vernal pool and wetland habitats.

Correspondence from representatives of each of the landowners within the Plan Area indicates that mitigation for loss of wetlands would involve a combination of avoidance and preservation of wetland areas. Another option would be for the Applicant to purchase credits in a USFWS-approved mitigation bank to satisfy the needs for mitigation (as done for Diamond Creek). Under this option, the Applicant would be relieved of any further responsibility and liability. A suitable approved mitigation bank is available in the region, called Wildlands, Inc. In the event that this mitigation option is pursued, no further surveys of on-site wetlands, salvage notification, or monitoring reports would be required. The specific requirements for mitigation of impacts on each property within the Plan Area would be determined through negotiations between the affected landowner, the USCOE, and the USFWS.

While the Proposed Project would involve considerable effort to mitigate for vernal pool losses, there continues to be disagreement in the scientific community about the long-term ecological viability of artificially created vernal pools. For this reason residual impacts are considered potentially significant and unavoidable. At the same time, it should be noted that the USCOE has approved this approach, provided 5 years of monitoring occurs.



|                               |                                                                                                                     |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-4(A):</b>       | <b>Loss of wildlife habitat.</b>                                                                                    |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                         |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.5-1 (Preserve and construct vernal pools or purchase credits from an approved mitigation bank) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Significant                                                                                                         |

Development of Phase I would require the removal of a substantial area (approximately 610.32 acres) of annual grassland habitat in proximity to the oak and riparian forest present in the Plan Area, which would have an adverse impact on the foraging and breeding of a variety of raptors, mammals, amphibians, and other species. From a botanical point of view, the non-native annual grassland community is considered to have limited value; most plant species are not California natives, and few rare or endangered plant species are found in this plant community. Grassland habitat does provide important foraging, nesting and hibernation habitat for numerous wildlife species, including foraging raptors. In addition to grasslands, approximately 5.77 acres of vernal pools and other wetlands and 12.6 acres of oak woodland/riparian habitat would be affected by the Proposed Project. As discussed in Impacts 4.5-2(A) and 4.5-3(A), wetlands and oak woodland/riparian areas provide habitat for special-status species and other wildlife. Long-term loss of grassland, wetlands, oak woodland and riparian habitats is considered a significant impact. Implementation of Mitigation Measure 4.5-1, along with compliance with applicable permits, would reduce this loss, but it would remain significant and unavoidable.

|                               |                                                                          |
|-------------------------------|--------------------------------------------------------------------------|
| <b>IMPACT 4.5-5(A):</b>       | <b>Disturbance to wildlife and wildlife habitat during construction.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                              |
| <b>MITIGATION MEASURES:</b>   | Mitigation Measure 4.5-2 (Implement construction protocols)              |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                    |

The natural behaviors of wildlife species, including birds and mammals, are disrupted by noise, dust, vibration, human presence, and other aspects of construction activity. Providing for adequate parking, lubrication and refueling areas remote from sensitive habitat locations would reduce long-term impacts to those resources. Providing clear notification of areas that should be preserved through the use of construction fencing, flagging or other means would ensure that disturbance is temporary. Dust suppression measures as part of good construction practices would prevent excessive dust coating the leaves and trunks of valuable trees, which can damage those trees.

Construction activities can also expose soils that are transported to rainwater to the creek as sediment. Excessive sedimentation coats benthic (e.g. "bottom-dwelling") fauna, lowers habitat value of aquatic species, and can introduce toxic components to the aquatic ecosystem. These impacts are readily avoided with the implementation of erosion and sediment control procedures.

Mitigation Measure 4.5-2 identifies appropriate construction protocols to minimize the disturbance of wildlife. These protocols would include the following:

- Designate adequate parking, lubrication and refueling areas on project construction diagrams, showing these areas to be away from potentially sensitive habitat;
- Place construction fencing or flagging to prevent unnecessary disturbance to potentially sensitive habitat areas;
- Implement dust suppression measures to avoid generating substantial particulate matter; and
- Implement an erosion and sediment control plan to avoid excessive off-site runoff and sediment transport to adjacent waterways.

With the use of construction protocols, impacts from construction activities would be less than significant.

**IMPACT 4.5-6(A):**

**Substantial interference with the movement of resident and migratory wildlife species.**

SIGNIFICANCE:

Less than significant

MITIGATION MEASURE:

None required

Implementation of Phase I could result in a substantial impediment to the movement of wildlife that presently occur in the Plan Area. Those wildlife species that are adapted to live in grasslands and trees, or that move between isolated pockets of water, would not easily move across the future urbanized landscapes. In urban settings, wildlife species are often injured or killed by automobile traffic, intercepted and/or injured by domestic pets, or be unable to traverse large distances without benefit of shade or intermediate resting areas.

The Applicant proposes to maintain a majority of the riparian corridors in the natural oak woodland state, as an open space designation. These areas would continue to be valuable conduits for wildlife moving from east to west across the site. Many species use riparian corridors, where food and cover are present to move from one area to another. With the preservation of the open space corridors through the Plan Area in relatively natural habitat conditions, the impact on wildlife movement would be less than significant.

**IMPACT 4.5-7(A):**

**Loss of special-status plant species occurring in vernal pools.**

SIGNIFICANCE:

Potentially significant

MITIGATION MEASURES:

Mitigation Measure 4.5-3 (Incorporate soil and seedbank salvage in construction of vernal pools)

RESIDUAL SIGNIFICANCE:

Potentially significant



Bogg's Lake hedge hyssop, slender orcutt grass and Sacramento orcutt grass are the only federal or State listed plant species that is reported to potentially occur in the vicinity of the Plan Area; however, it was not encountered in field surveys.<sup>26</sup> Bogg's Lake hedge hyssop (State endangered) is restricted to vernal pool habitats. At least seven other vernal pool species with either candidate or CNPS 1B status could also occur; however, deterministic surveys have not been completed. Species with candidate or CNPS 1B status are not protected under the Endangered Species Act. Therefore impacts on them are not considered significant unless there is a "substantial" effect on the species.

Suitable habitat is reported to occur in the Plan Area for a number of non-listed, special-status species, including, big scale balsamroot, dwarf downingia, Ahart's dwarf rush, legenere, pincushion navarettia, Sacramento Orcutt grass, and slender orcutt grass. None of these species were observed during the preparation of wetland delineations for properties in the Plan Area, but not all of the delineations were prepared during the appropriate time of year to observe these plants. These plants are generally federal or State candidate species or have been included in the CNPS 1B list, which is intended to include only those species that appear to meet the criteria for federal or State listing; for these species only a "substantial" adverse effect would be considered a significant impact. Because specific surveys for these species were not performed, it is not possible to definitely conclude that the species do not occur in the Plan Area. However, while the likelihood of these species being present and not detected is considered small, the potential impact is considered potentially significant, because there is not direct evidence that these species are not present.

The wetland mitigation plan developed for Section 404 permits proposes to construct new vernal pools as compensation for those lost as a result of developing of the Plan Area. To ensure that these new vernal pools contain the species discussed above, soil from the natural vernal pools should be excavated and used to inoculate the constructed vernal pools. This inoculum should contain the seedbank of both plants and fauna that existed in the natural pools, including, if present, the Boggs Lake hedge hyssop, slender Orcutt grass and Sacramento Orcutt grass. If vernal pool recreation is successful, the relocated plants should survive. However, because successful recreation of vernal pools is not certain (see Impact 4.5-3), this impact is considered potentially significant and unavoidable.

|                               |                                                                                                  |
|-------------------------------|--------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-8(A):</b>       | <b>Loss of federal threatened vernal pool fairy shrimp.</b>                                      |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                      |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.5-3 (Incorporate soil and seedbank salvage in construction of vernal pools) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Potentially significant                                                                          |

At least one species of fairy shrimp that is a federally-listed threatened species has been observed in the project vicinity, and could be considered likely to occur in the vernal pools in the Plan Area. The vernal pool fairy shrimp was not listed at the time field surveys and wetland delineations were performed. However, the fairy shrimp has subsequently been listed, so any "take" of the species is prohibited without specific authorization from the USFWS under Sections

7 or 10 of the Federal Endangered Species Act. The wetland delineation and permitting process on properties in the Plan Area are in various stages; for some properties delineations are being verified, and other properties have received their discharge notifications allowing fill of wetlands.

The one case where mitigation activities have already been performed is the Diamond Creek property, where the applicant has included the use of natural vernal pool inoculum in wetlands constructed for vernal pool mitigation; it would be expected that this inoculum would contain some vernal pool fairy shrimp eggs, if they exist in the wetlands where mitigation is required. Therefore, in cases such as the Diamond Creek mitigation program, compliance with the requirements of the USFWS biological opinion and Section 7 or 10 permit should result in a minimum impact on the survival of the listed vernal pool fairy shrimp species.

The wetland mitigation plan developed for Section 404 permits proposes to construct new vernal pools as compensation for those lost as a result of developing of the Plan Area. To provide the maximum opportunity for preservation of these species, if present, the soil for natural vernal pools should be excavated and used to inoculate the constructed vernal pools. This inoculum should contain the seedbank of both plants and fauna that existed in the natural pools. The created vernal pools, inoculated with material from the natural vernal pools, would have the greatest chance of providing habitat for any species that were originally present.

As an alternative to constructing new vernal pools, the applicant may purchase credits in a USFWS-approved mitigation bank to satisfy the needs for mitigation, in which case salvage and incorporation of inoculate would be not be required.

While the magnitude of the impact would be reduced by this mitigation measure, it is, as of yet, an unproven mitigation. Like the success of constructed vernal pools there is substantial disagreement within the scientific community as to whether constructed vernal pools would support the long-term survival of protected invertebrates. Therefore, this impact is considered potentially significant and unavoidable.

|                               |                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-9(A):</b>       | <b>Potential disturbance of Swainson's hawk and other legally-protected raptor nests.</b>              |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                            |
| <b>MITIGATION MEASURES:</b>   | Mitigation Measure 4.5-4 (Conduct pre-construction nest survey and implement appropriate restrictions) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                  |

Special-status species evaluations in the Plan Area concluded that habitat was suitable for Swainson's hawks nesting, although there were no records of nests within the Plan Area. Based on a raptor survey on May 20, 1994, it was concluded that no active Swainson's hawk nests were present. However, Swainson's hawks were observed in the Plan Area in the Diamond Creek and Walaire 160 properties during brief reconnaissance surveys during the spring of 1995. While no nests were identified, the Swainson's hawks showed behavior typical of hawks in the vicinity of a nest. This activity included circling in tandem and retreat to woodland overstory with prey. This evidence is sufficient to indicate a nest could occur in the Plan Area, although unidentified at this



time. Further, the absence of nesting Swainson's hawks in 1994 does not preclude the hawks from nesting in the Plan Area in later years, during construction activities.

Disturbance resulting in active nest abandonment, removal of an active nest or otherwise injuring, pursuing or killing a Swainson's hawk would be prohibited under the California Endangered Species Act. In the event that Swainson's hawks occupy nests in the Plan Area in the future, the possibility exists that nests could be damaged or destroyed in the removal of tress for creek crossings or park and recreation facilities. Further, construction activities, especially earthmoving and grading, are known to disturb nesting activities (incubating eggs, raising young) which could result in the abandonment of the nest and the loss of young birds. Due to the potential effects of construction on future nesting Swainson's hawks, the impact is considered significant.

Special-status species assessments conducted in the Plan Area also concluded that suitable nesting habitat exists for a number of legally-protected raptors, including red-tailed hawks and white-tailed kites. Both of these species have been documented nesting in the general vicinity. While legally-protected raptor species do not have the full protection of the Endangered Species Act, it is unlawful to take, possess, or destroy the nest or eggs of any of these species (Fish and Game Code § 3503.5). Therefore, if an active nest were present in a tree designated for removal in the year of construction, activity in the vicinity could result in "take" of the bird. Disturbance resulting in nest abandonment or activities that would otherwise injure, pursue or kill a fully-protected bird-of-prey would be considered a significant impact. Nesting raptors could be affected during construction if nests with fledgling birds are removed or disturbed.

To ensure that legally-protected birds-of-prey are not taken during project construction, to the extent possible, tree removals should occur during the period when raptors are not nesting (August through February). If removal of trees during the nesting season is unavoidable, pre-construction raptor nest surveys should be conducted to determine whether or not legally-protected raptor nests are present in trees designated for removal. In the event that nests are present, appropriate protocols should be developed in consultation with CDFG and followed during the removal or relocation of those nests. Implementation of these measures would reduce impacts on the nesting habitat to a less-than-significant level.

|                            |                                                             |
|----------------------------|-------------------------------------------------------------|
| <b>IMPACT 4.5-10(A):</b>   | <b>Potential loss of valley elderberry longhorn beetle.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                       |
| <b>MITIGATION MEASURE:</b> | None required                                               |

Surveys of the Plan Area in December 1993 through April 1994 identified one elderberry bush, situated close to Pleasant Grove Creek in the Diamond Creek portion of the Plan Area. No evidence of the valley elderberry longhorn beetle's (VELB's) presence was found and the shrub is located within the area designated for dedicated open space. The loss of elderberry shrubs, which could provide habitat for the VELB, is considered significant; however, because the Proposed Project would preserve existing and potential elderberry habitat in open space as part of the natural creek corridors, this potential impact is considered less than significant.

**FULL PROJECT IMPACTS**

|                               |                                                          |
|-------------------------------|----------------------------------------------------------|
| <b>IMPACT 4.5-1(B):</b>       | <b>Loss of oak trees of greater than 6" dbh.</b>         |
| <b>SIGNIFICANCE:</b>          | Short-term significant, long-term, less than significant |
| <b>MITIGATION MEASURE:</b>    | None identified                                          |
| <b>RESIDUAL SIGNIFICANCE:</b> | Short-term significant, long-term, less than significant |

As discussed previously for Phase I, oak trees are a highly important biological resource because they support a diverse community of insects and wildlife. The Full Project would replace some oak trees with development. In addition to the trees removed for Phase I, approximately 0.2 acres would be removed in Phase II for a collector roadway on Walaire 160. As discussed under Impact 4.5-1(A), with implementation of the City’s Tree Preservation Regulations, the long-term impact would be less than significant, but the short-term loss of oak trees would be significant and unavoidable.

|                             |                                                      |
|-----------------------------|------------------------------------------------------|
| <b>IMPACT 4.5-2(B):</b>     | <b>Loss oak woodland and mixed riparian habitat.</b> |
| <b>SIGNIFICANCE:</b>        | Less than significant                                |
| <b>MITIGATION MEASURES:</b> | None required                                        |

Riparian woodlands support the greatest diversity and variety of wildlife of any habitat type in California. The majority of the riparian/oak woodland habitat in the Plan Area would be preserved through open space along Pleasant Grove Creek, the South Branch of Pleasant Grove Creek, and portions of their major tributaries. The impacts on the riparian corridors would occur where creek crossings are required for Plan Area roadways and pedestrian/bicycle bridges, sewer and collector crossings where the trail system would result in the habitat in the riparian corridors, and in some locations along the urban/open space interface.

In addition to the areas identified for the Phase I implementation of the Full Project would include the following area:

|                       |             |        |         |
|-----------------------|-------------|--------|---------|
| Walaire 160 Collector | 100’ x 100’ | 10,000 | 0.2 ac. |
|-----------------------|-------------|--------|---------|

The total potential losses of riparian habitat would be increased to 9.17 acres under the Full Project (see Table 4.5-4, above).

The implementation of Section 1600 Streambed Alteration Agreements and Best Management Practices are intended to minimize adverse impacts as a result of construction and sources of erosion. However, the direct removal of vegetation and long term disturbance cannot be avoided. Within the overall project, the floodway and riparian corridors are protected from vegetation removal and excessive disturbance to wildlife. These protected areas will regenerate additional vegetation and develop increasing biological value as a result of being protected. Therefore, the relatively small area of riparian habitat removed by the proposed riparian crossings and pedestrian



trail system would be less than significant. Further, the loss of trees would be mitigated by the City's Tree Preservation regulations.

|                               |                                                                                                                     |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-3(B):</b>       | <b>Loss of vernal pools, seasonal wetlands and other jurisdictional waters of the U.S.</b>                          |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                         |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.5-1 (Preserve and construct vernal pools or purchase credits from an approved mitigation bank) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Potentially significant                                                                                             |

The Full Project could result in fill of up to approximately 10.08 acres of vernal pools, seasonal wetlands, swales and intermittent drainages. Wetland delineations based on the methodology approved by the USCOE have been prepared for all Plan Area properties. All but one (Walaire 160) of the delineations have received formal verification notices from the USCOE. Because wetland delineations have not been verified for all properties, it is not possible to precisely quantify the area, or type of wetlands affected.

As described above, the landowners have proposed that all wetland impacts would be mitigated through implementation and compliance with the provisions of the Section 404 permit for wetland fill, or purchase of credits from an approved wetlands mitigation bank, such as Wildlands. The specific requirements for mitigation of impacts on each property within the Plan Area would be determined through negotiations between the affected landowner, the USCOE, and the USFWS.

While the Proposed Project would involve considerable effort to mitigate for vernal pool losses, there continues to be disagreement in the scientific community about the long-term ecological viability of artificially created vernal pools. The USCOE has approved this approach, providing monitoring occurs for 5 years. Nonetheless, because the success of artificially created vernal pools is uncertain, residual impacts are considered potentially significant and unavoidable.

|                               |                                                                                                                     |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-4(B):</b>       | <b>Loss of wildlife habitat.</b>                                                                                    |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                         |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.5-1 (Preserve and construct vernal pools or purchase credits from an approved mitigation bank) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Significant                                                                                                         |

Development of Phase II would result in the loss of approximately 518.98 acres of annual grassland habitat, 2.4 acres of oak woodland/riparian habitat, and 4.31 acres of vernal pools and other wetlands. The Full Project could result in the loss of up to 1,129.3 acres of annual grassland, an important community for a variety of wildlife and used for foraging habitat for Swainson's hawks and other protected raptors, as well as 15.0 acres of oak woodland/riparian and 10.08 acres of various wetland habitats. As discussed under Impact 4.5-4(A), this loss of habitat could adversely affect wildlife. While Mitigation Measure 4.5-1 would offset the Full Project

effect on vernal pools, no feasible mitigation has been identified for the other habitats. Therefore, this is considered a significant impact.

|                         |                                                                          |
|-------------------------|--------------------------------------------------------------------------|
| <b>IMPACT 4.5-5(B):</b> | <b>Disturbance to wildlife and wildlife habitat during construction.</b> |
| SIGNIFICANCE:           | Significant                                                              |
| MITIGATION MEASURES:    | Mitigation Measure 4.5-2 (Implement construction protocols)              |
| RESIDUAL SIGNIFICANCE:  | Less than significant                                                    |

As described for Phase I, the natural behaviors of wildlife species, including birds and mammals, are disrupted by noise, dust, vibration, human presence, and other aspects of construction activity. This impact could be minimized by restricting construction activities near preserved oak and riparian habitat, providing parking away from sensitive areas and erecting temporary fencing.

Construction activities could also expose soils that are transported via rainwater to the Creek as sediment. Excessive sedimentation coats benthic (e.g. "bottom-dwelling") fauna, lowers habitat value of aquatic species, and can introduce toxic components to the aquatic ecosystem. These impacts are readily avoided with the implementation of erosion and sediment control procedures. With these mitigation measures, impacts from construction activities would be less than significant.

|                         |                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-6(B):</b> | <b>Substantial interference with the movement of resident and migratory wildlife species.</b> |
| SIGNIFICANCE:           | Less than significant                                                                         |
| MITIGATION MEASURE:     | None required                                                                                 |

Implementation of the Full Project could result in a substantial impediment to the movement of wildlife that presently occurs in the Plan Area (see Impact 4.5-6(A) for a complete discussion). The Applicant proposes to maintain the riparian corridors in the natural oak woodland state, as an open space designation. With the preservation of the open space corridors through the Plan Area in relatively natural habitat conditions, the impact on wildlife movement would be less than significant.

|                         |                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-7(B):</b> | <b>Loss of special-status plant species occurring in vernal pools.</b>                           |
| SIGNIFICANCE:           | Potentially significant                                                                          |
| MITIGATION MEASURE:     | Mitigation Measure 4.5-3 (Incorporate soil and seedbank salvage in construction of vernal pools) |
| RESIDUAL SIGNIFICANCE:  | Potentially significant                                                                          |

As noted above, special-status plant species that have not been reported could occur in the Plan Area, and the likelihood that these species would occur is very low. Nonetheless, surveys have



not been completed for every species, so there is the possibility that these plant species occur on site. Therefore, this is considered a potentially significant impact.

The wetland mitigation plan developed for Section 404 permits proposes to construct new vernal pools as compensation for those lost as a result of developing of the project area. To ensure that these new vernal pools contain the species discussed above, soil from the natural vernal pools should be excavated and used to inoculate the constructed vernal pools. This inoculum should contain the seedbank of both plants and fauna that existed in the natural pools including, if present, the Boggs Lake hedge hyssop. However, because the success of artificially created vernal pools is not certain, the impact on special-status plant species is considered potentially significant.

|                               |                                                                                                  |
|-------------------------------|--------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-8(B):</b>       | <b>Loss of federal threatened vernal pool fairy shrimp.</b>                                      |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                      |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.5-3 (Incorporate soil and seedbank salvage in construction of vernal pools) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Potentially significant                                                                          |

As discussed under Impact 4.5-8(A), at least one species of fairy shrimp that is a federally-listed threatened species has been observed in the Plan Area. Although not verified to be on the Plan Area, the protected fairy shrimp could occur in the vernal pools in the Full Project.

While the magnitude of the impact would be reduced by permit compliance and Mitigation Measure 4.5-3, it is, as of yet, an unproven mitigation. Like the success of constructed vernal pools, there is substantial disagreement within the scientific community as to whether constructed vernal pools would support the long-term survival of protected invertebrates. Therefore, this impact is considered potentially significant and unavoidable.

This measure would not apply to mitigation through purchase of wetland credits in a USFWS-approved mitigation bank.

|                               |                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.5-9(B):</b>       | <b>Potential disturbance of Swainson's hawk and other legally-protected raptor nests.</b>              |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                            |
| <b>MITIGATION MEASURES:</b>   | Mitigation Measure 4.5-4 (Conduct pre-construction nest survey and implement appropriate restrictions) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                  |

All but one (Woodcreek West) of the Full Project properties could support habitat suitable for Swainson's hawks and other protected raptor nests. Refer to Impact 4.5-9(A) for a complete discussion of this impact.

To ensure that fully-protected birds-of-prey are not taken during project construction, all tree removals should occur during the period when raptors are not nesting (August through February). If removal of trees during the nesting season is unavoidable, pre-construction raptor nest surveys

should be conducted to determine whether or not legally-protected raptor nests are present in trees designated for removal. In the event that nests are present, appropriate protocols should be followed during the removal or relocation of those nests. Implementation of these measures would reduce impacts to the nesting habitat to a less-than-significant level.

|                            |                                                             |
|----------------------------|-------------------------------------------------------------|
| <b>IMPACT 4.5-10(B):</b>   | <b>Potential loss of valley elderberry longhorn beetle.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                       |
| <b>MITIGATION MEASURE:</b> | None required                                               |

Surveys of Phase II of the Full Project area in December 1993 through April 1994 indicated no evidence of the valley elderberry longhorn beetle (VELB). The loss of elderberry shrubs, which could provide habitat for the VELB, is considered significant; however, since the Proposed Project would preserve existing and potential elderberry habitat in open space as part of the natural creek corridors, this potential impact is considered less than significant.

#### **4.5.5 MITIGATION MEASURES**

Most impacts on biological resources in the Plan Area would be avoided by careful planning and maintenance of the open space areas and management of natural resources near construction zones. Implementation of general plan policies adopted by the City of Roseville would also substantially reduce impacts to specific resources. Additional mitigation measures to avoid, minimize or compensate for project impacts are listed below.

##### **JURISDICTIONAL WETLANDS**

**Mitigation Measure 4.5-1: Preserve and construct vernal pools or purchase credits from an approved wetland mitigation bank.**

Mitigation Measure 4.5-1 applies to Impacts 4.5-3(A) and (B) and 4.5-4(A) and (B).

Each property within the Plan Area shall be permitted under the Clean Water Act Section 404 permit process prior to development. Mitigation would consist of on-site avoidance where practicable and desirable, on-site wetland construction where practicable and desirable, and/or off-site wetland construction and off-site acquisition where approved by the permitting agencies.

As an alternative to preserving and recreating wetlands, the Applicant could, prior to issuance of building permits, acquire credits from a Wetland Mitigation Bank approved by the US Army Corps of Engineers and the USFWS for the purposes of mitigating impacts on vernal pools, fairy shrimp and vernal pool plant species. The credits shall be in direct proportion to vernal pool losses on the property, as determined by a wetland or habitat delineation.



In the event this mitigation is implemented, the applicant will incur no further obligation for surveys, monitoring, salvage notification or seedbank salvage, as required by the operation of the approved Mitigation Bank.

#### **DISTURBANCE OF WILDLIFE DURING CONSTRUCTION**

##### **Mitigation Measure 4.5-2: Implement construction protocols.**

Mitigation Measure 4.5-2 applies to Impact 4.5-5(A) and (B).

The Proposed Project shall require the implementation of construction protocols that include, but may not be limited to, the following:

- Restrict construction activities to areas away from preserved oak and riparian habitat.  
  
Construction activities in the vicinity of oak trees shall be minimized. Laydown, staging, refueling and parking areas shall not be located adjacent to open space oak or riparian zones. Construction activities that by necessity occur in the vicinity of oak woodlands and riparian zones to be preserved shall be supervised by an onsite responsible compliance officer designated by the developer. Encroachments or damage that have not been authorized by a tree permit shall be prohibited, and measures to prevent damage to trees in the vicinity shall be implemented as detailed in the Tree Preservation Chapter of the Zoning Ordinance.
- Erect temporary barrier fencing to delimit protected areas.  
  
Temporary fencing, consisting of five-foot orange construction drift fence, flagging, signs or other markings shall be erected around open space areas and restricted areas, and maintained for the duration of construction, to prevent inadvertent damage to natural resources. Fencing shall be maintained, and shall be the responsibility of an on-site compliance officer designated by the developer.

#### **VERNAL POOL PLANT SPECIES AND FAIRY SHRIMP**

##### **Mitigation Measure 4.5-3: Incorporate soil and seedbank salvage in construction of vernal pools.**

Mitigation Measure 4.5-3 applies to Impacts 4.5-7(A) and (B), and 4.5-8(A) and (B).

In the mitigation of vernal pools that would be filled or otherwise disturbed, the landowners shall use harvested inoculum from on-site vernal pools. Removal of topsoil from harvested vernal pools shall comply with the most recent USCOE and USFWS guidelines at the time of construction, or consist of removal of the top 2" of soil, followed by the next 4" of soil, and placement of these layers in constructed vernal pools in reverse order (e.g. first the 4" followed by the 2") to approximately reconstruct the natural soil horizon.

If mitigation banking is used as mitigation instead of vernal pool recreation, this mitigation measure would not apply.

#### **SWAINSON'S HAWK AND LEGALLY-PROTECTED RAPTOR NESTS**

##### **Mitigation Measure 4.5-4: Conduct pre-construction nest survey and implement appropriate restrictions.**

Mitigation Measure 4.5-4 applies to Impact 4.5-9(A) and (B).

To ensure that fully protected and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the applicant shall implement the following measures:

- (a) When feasible, all tree removal shall occur between August 30 and March 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the DFG, or
- (b) Prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between March 15 to August 30, all trees within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests by a qualified biologist. If active raptor nests are found, and the site is within 350 feet of potential construction activity, a fence shall be erected around the tree at a distance of up to 350 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City. The City may consult with CDFG regarding the appropriate buffer distance.
- (c) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zone), unless directly related to the management or protection of the legally-protected species.
- (d) In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).

For tree removal, the following measure shall be implemented:

- (e) If a legally-protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.

TABLE 4.5-5

**BIOLOGICAL RESOURCES RESIDUAL IMPACT SUMMARY TABLE**

| <b>Impact</b>                                                                                                 | <b>Phase I Impacts</b>                                   | <b>Full Project Impacts</b>                              |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|
| Impact 4.5-1(A and B): Loss of oak trees of greater than 6" dbh.                                              | Short-term significant, long-term, less than significant | Short-term significant, long-term, less than significant |
| Impact 4.5-2(A and B): Loss of oak woodland and mixed riparian habitat.                                       | Less than significant                                    | Less than significant                                    |
| Impact 4.5-3(A and B): Loss of vernal pools, seasonal wetlands and other jurisdictional waters of the U.S.    | Potentially significant                                  | Potentially significant                                  |
| Impact 4.5-4(A and B): Loss of wildlife habitat.                                                              | Significant                                              | Significant                                              |
| Impact 4.5-5(A and B): Disturbance to wildlife and wildlife habitat during construction.                      | Less than significant                                    | Less than significant                                    |
| Impact 4.5-6(A and B): Substantial interference with the movement of resident and migratory wildlife species. | Less than significant                                    | Less than significant                                    |
| Impact 4.5-7(A and B): Loss of special-status plant species occurring in vernal pools.                        | Potentially significant                                  | Potentially significant                                  |
| Impact 4.5-8(A and B): Loss of federal threatened vernal pool fairy shrimp.                                   | Potentially significant                                  | Potentially significant                                  |
| Impact 4.5-9(A and B): Potential disturbance of Swainson's hawk and other legally-protected raptor nests.     | Less than significant                                    | Less than significant                                    |
| Impact 4.5-10(A and B): Potential loss of valley elderberry longhorn beetle.                                  | Less than significant                                    | Less than significant                                    |



## ENDNOTES

1. City of Roseville. *Environmental Impact Report, Del Webb Specific Plan*, September 1993.

City of Roseville. *Draft Environmental Impact Report, Comprehensive Land Use Element*, February 1995.

2. Stewart, J., Sugnet & Associates. Correspondence to Mr. Brian Boxer concerning Woodcreek West and Woodcreek North Wetland Mitigation Plans, April 6, 1995.

Stewart, J., Sugnet & Associates. Correspondence to Mr. Brian Boxer concerning Roseville West Group-Walaire 160, April 6, 1995.

Stewart, J., Sugnet & Associates. Correspondence to Mr. Brian Boxer concerning Diamond Creek Wetland Permitting Status, March 29, 1995.

Sugnet & Associates. *Wetland Delineation for Woodcreek North, SARES-REGIS Group*, Roseville California. Prepared for U.S. Army Corps of Engineers, March 9, 1995.

Sugnet & Associates. *Wetland Delineation for Woodcreek West, Sares-Regis Group*, Roseville California. Prepared for U.S. Army Corps of Engineers, March 9, 1995.

Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, July 21, 1994.

Sugnet & Associates. Comments Regarding Dames & Moore West Roseville Baseline Studies, September 1994. Prepared for West Side Owners Group October 12, 1994.

Sugnet & Associates. Section 404 Regulatory Compliance Pre-discharge notification, regulatory Number 199400433, Roseville 140, Mourier Land Investment Corporation, Roseville, California. Prepared for U.S. Army Corps of Engineers, November 2, 1994.

Sugnet & Associates. *Wetland Delineation for Roseville 140*, John Mourier Construction, Inc., Placer Co. Prepared for U.S. Army Corps of Engineers, January 5, 1995.

Sugnet & Associates. *Wetland Delineation for Walaire Property*, John Mourier Construction, Inc., Placer County. Prepared for U.S. Army Corps of Engineers, January 5, 1994.

Sugnet & Associates. *Special Status Species Assessment for Woodcreek Oaks West*, Placer County, California. Prepared for Sares•Regis Group, December 17, 1993.

Sugnet & Associates. *Special Status Species Assessment for Woodcreek Oaks North*, Placer County, California. Prepared for Sares•Regis Group, December 17, 1993.



3. Wetlands area has not been verified, therefore the total area is expressed as a range.
  4. City of Roseville. *West Roseville Specific Plan Area Oak Woodland, Existing Conditions*, p. 2, July 25, 1994.
  5. City of Roseville Draft West Roseville Baseline Studies, September 1994, p. 5-6.
  6. City of Roseville. *Draft Environmental Impact Report, Comprehensive Land Use Element*, p. 4.5-2, February 1995.
  7. John Hiscox, CDFG District Fisheries Biologist, personal comment, June 8, 1995.
  8. USFWS 1995.
  9. Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, July 21, 1994.
- Sugnet & Associates. *Wetland Delineation for Roseville 140, John Mourier Construction, Inc.*, Placer Co. Prepared for U.S. Army Corps of Engineers, January 5, 1995.
- Sugnet & Associates. *Wetland Delineation for Walaire Property, John Mourier Construction, Inc.*, Placer County. Prepared for U.S. Army Corps of Engineers, January 5, 1994.
10. Environmental Library. 1987. Corps of Engineers Wetlands Delineation Manual, Technical report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss. 133 pps.
  11. Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, July 21, 1994.
  12. Hickman, J.E. (ed). *The Jepson Manual*. University of California Press, Berkeley, 1400 pps., p. 1029, 1993.
  13. City of Roseville Draft West Roseville Baseline Studies, p. 5-14, September 1994.
  14. Hickman, J.E. (ed). *The Jepson Manual*. University of California Press, Berkeley, 1400 pps., p. 848, 1993.
  15. Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, p. 18, July 21, 1994.
  16. Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, p. 19, July 21, 1994.
  17. Mike Weber, EIP Associates. Personal communication to E.J. Koford EIP Associates, November 29, 1996.

18. Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, p. 22, July 21, 1994.
19. Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. *California Wildlife*, Volume 3, Mammals. California Department of Fish and Game, Sacramento, 407 pp, p. 2.
20. City of Roseville Draft West Roseville Baseline Studies, September 1994.
21. City of Roseville Draft West Roseville Baseline Studies, p. 5-21, September 1994.
22. Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, p. 19, July 21, 1994.
23. City of Roseville Draft West Roseville Baseline Studies, p. 5-22, September 1994.
24. Lungren, D. Opinion of the Attorney General concerning the interpretation of "harm" and "take" under the State Endangered Species Act, No. 94-605, May 15, 1995.
25. "Category 1 and 2" were previously recognized groups of potentially listed species. This system is in the process of being superseded. At present the USFWS recognizes only species which are proposed or candidates for listing.
26. Sugnet & Associates. *Roseville West Specific Plan Area, Biotic Resources, Existing Conditions*, City of Roseville, California, p. 18, July 21, 1994.





---

---

## ***4.6 CULTURAL RESOURCES***

---

---



---

---

## 4.6 CULTURAL RESOURCES

---

---

### 4.6.1 INTRODUCTION

This section describes known cultural (prehistoric and historic) resources in the Plan Area. Prehistoric resources are those sites and artifacts associated with the indigenous, non-Euroamerican population, generally prior to contact with people of European descent. Historical resources include structures, features, artifacts and sites that date from Euroamerican settlement of the region. The potential effects on cultural resources by development under the NRSP are analyzed and, where applicable, measures to minimize those effects are presented. A technical appendix that includes more site-specific information than this section has been prepared; however, in order to protect sensitive cultural resources from disturbance, the technical appendix is available only to appropriate State agencies, archaeologists, and historians. This section presents information prepared by Peak & Associates, Inc., cultural resource specialists, who conducted the cultural resource investigations and field studies of all properties within the Plan Area.

Both Phase I and the Full Project (Phases I and II combined) are evaluated using the Plan Area's existing conditions as a baseline.

### 4.6.2 ENVIRONMENTAL SETTING

#### Prehistory

Until relatively recent years, the study of Sierran archeology lagged far behind the Central Valley and coastal areas in terms of developing regional chronologies and other basic aspects of systematic study of the prehistory of the area. The first effective synthesis of Sierran archeology was produced by Heizer and Elsasser (1953), and further refined by Elsasser (1960). Since that time, major archeological projects in the Sierra have proliferated, largely due to work on water projects and other cultural resources management-based research efforts. For the northern Sierra alone, archeological sequences, based on excavation of stratified sites and other data, are available for the Lake Tahoe vicinity,<sup>1</sup> the Lake Oroville locality,<sup>2</sup> and for the proposed Auburn Reservoir area. The latter, being of most relevance to the Plan Area, will be discussed briefly.

There have been several archeological reconnaissances conducted in the Auburn Reservoir area, but the great majority of prehistoric sites recorded (i.e., milling stations, surface lithic scatters, small, single-component sites) are relatively uninformative in terms of larger regional research goals. Sites that have been excavated include a chert quarry<sup>3</sup> and five midden sites, all reported during Phases II and III of the Auburn Reservoir Project.<sup>4</sup> The most informative of these is the Spring Garden Ravine site (CA-PLA-101), which contained three well-defined strata.<sup>5</sup>

The lowest stratum (C) has been radiocarbon dated at about 1400 B.C., and contains an assemblage similar to the Martis Complex, as defined at high-elevation sites in the Sierra. The artifacts include large projectile points (mostly of basalt and slate), atlatl (dart-thrower) weights, numerous core tools, and several varieties of grinding implements. The collection would not look out of place had it been found in Martis Valley. The next stratum (B) is less easily defined, and appears to represent a transition between cultures represented by the upper and lower strata. Some of this transitional appearance may be attributable to simple physical mixing of deposits, but the basic stratigraphic integrity of the site is indicated by consistency of the two radiocarbon dates from stratum B (A.D.  $1039 \pm 80$  and  $976 \pm 90$ ). The upper stratum contains small projectile points (arrowheads), hopper mortars, and other artifacts comparable to recent archeological collections elsewhere in the northern foothills. Stratum A is, therefore, probably a manifestation of the ancestral Nisenan, the Indian group inhabiting the area at the time of Euroamerican contact.

### **Ethnology**

The Nisenan, or Southern Maidu, occupied the upper drainages and the adjacent ridges of the Yuba River, the north, middle, and south forks of the American River, and at least the upper north side of the Cosumnes River. The eastern limit of the territory is conventionally believed to extend to the crest of the Sierra Nevada range. The Nisenan in the Valley proper also occupied some area west of the lower reaches of the Feather River.<sup>6</sup>

The Nisenan linguistically are grouped with the Northern Maidu and Konkow within the Penutian family, located along the northeastern half of the Sacramento Valley and the adjoining western slopes of the Sierra Nevada.<sup>7</sup> Kroeber (1925) distinguished three dialects within the larger territory occupied by the Nisenan, but Riddell indicated more distinctions are possible. Wilson and Towne (1978) distinguished several "centers", presumably linguistic and social groupings.

The Nisenan were socially integrated at the village or community group level<sup>8</sup> with the group participating in the decision-making process. The villages would range in size from 15 to 25 people to, at least in the Valley Nisenan, villages of over 500 people.<sup>9</sup> A very large settlement consisted of a major village and associated smaller camps, whether general or specialized in nature. A headman, respected by all and residing in the major village, had the authority to call upon the smaller associated groups in times of need; although, the smaller groups did not always have to obey.

The Nisenan inhabited a village near Roseville (Pichiku). This may have been a permanent settlement, as it was referred to as a "major village."<sup>10</sup> The villages for the Hill Nisenan were located on ridges and flats along the major streams and rivers within their territory. The satellite encampments and villages were probably located on the smaller water courses surrounding or nearby the major village. The Nisenan, as with other Sierran groups, moved into the higher elevations during the hot summer months. The main activity was collecting pine nuts and numerous other species of nuts, roots, and berries and was done primarily by women and children. The foraging groups in a locale could range from small, extended family groups, composed of a woman, her immediate female kin, and their adolescent children, to entire villages.<sup>11</sup> The men spent most of their time hunting or fishing for a wide variety of fish and



animals. Hunting was noted as often involving communal drives, with the best archers of the village posted to do the killing.<sup>12</sup> Individual hunters made extensive use of decoys and imitative sounds.

Most Nisenan never left the territory used by their own village group. However, there were in most large villages, at least some individuals who engaged in rather extensive trade with several valley groups as well as Sierra groups, such as the Washoe. The Hill Nisenan probably acquired obsidian and basketry from the east, in exchange for acorns from the Washoe,<sup>13</sup> but it is unclear whether they visited or were visited by the Washoe or a combined mutual exchange occurred. Presumably, the exchange network functioned both during the summer and fall.

Warfare existed among the Nisenan, although it was rare. Conflict initiated during territorial violations. Inter-tribal conflict occurred in the Roseville area during the 1820s. Men from the Auburn/Nevada City area were killed in the Roseville vicinity, and hatred and distrust was evident for a period of several years.

The Nisenan were little affected by the Spanish and Mexican incursions into California's interior.<sup>14</sup> They did suffer greatly from the epidemic of the 1830s that swept across California. Believed to have been brought by American fur trappers, the epidemic often was responsible for the decimation of entire villages. It was reported that the Nisenan attributed the epidemic of 1833 to bad air, sent to the valley by vengeful hill-dwelling shamans.<sup>15</sup> An estimated 75 percent of the native American population did not survive this epidemic, and many of the survivors relocated to the Sierra Nevadas.<sup>16</sup>

While many Nisenan survived the epidemic, they were greatly affected by the Gold Rush of 1849. John Marshall discovered gold in Coloma in 1848, within Nisenan territory. The Gold Rush soon followed, with tremendous repercussions for the Native American population.<sup>17</sup>

In the early 1870s, the Nisenan adopted the religious cults that swept through much of northern California following the inception of the Ghost Dance by the Paviotso near Walker Lake, Nevada in 1868. Unlike northwestern California, where the cults persisted well into the 20th century, the Nisenan abandoned the movement in the 1890s.<sup>18</sup>

## **History**

The Roseville area experienced a great amount of Euroamerican use. The general area was explored by non-native peoples prior to the 1848 gold discovery at Sutter's Mill. Gabriel Moraga led an expedition under the flag of Spain from Mission San Jose up to the Cosumnes and Feather Rivers in 1808. In 1813, Jose Arguello reached the Cosumnes River, where he battled a group of Miwok, hostile to the exploration. Narciso Duran and Luis Arguello passed through the region on their expedition, which originated in San Francisco in 1817. Arguello is credited with naming the Feather River, "El Rio de Las Plumas."<sup>19</sup>

Following the Spanish explorations, this region of California was visited by American trappers looking for new areas to exploit. Jedediah Smith, Joseph Walker, and Ewing Young passed through the region on their journeys through California.<sup>20</sup> After the famous gold rush began

in 1849, the region quickly became populated with prospectors, entrepreneurs, and others seeking fortunes.<sup>21</sup>

Once these fortune hunters realized the lack of easy fortune, many settled in the Roseville vicinity. Many of the 49'ers had been farmers prior to their journey to California, and reverted back to farming as a means of survival. Therefore, the development of the Roseville area by non-natives focused on ranching. After the settlement of California spread beyond the gold mining regions in the early 1850s, the early settlers discovered that the portions of the land located near the present community of Roseville were generally unsuitable for cultivation, but could be used for grazing purposes. To be profitable, a vast acreage for grazing large herds of cattle or sheep usually was required.

Railroad development served as the catalyst for growth in the Roseville area. The first railroad through southwestern Placer County was the California Central, which was started by a Marysville businessman, Charles Lincoln Wilson, in 1857. The goal of the proposed railway was to connect Marysville with Sacramento. Grading for the tracks was completed by 1860, and by late August or early September of 1861 the tracks were in present-day Roseville and on their way to Lincoln. However, the plan was never completed as the Central California succumbed to dwindling funds and strong competition from the Central Pacific Railroad when it reached the Roseville area from Sacramento in January of 1864.<sup>22</sup>

In August of 1864, O.D. Lombard drew up plans for a town centered around the junctions of the Central Pacific and California Central Railroads, aptly known as the "Junction". The Junction maintained slow growth throughout the 1860s. By 1870, the California Central had merged with Central Pacific, which in turn was absorbed by the Southern Pacific Railroad.<sup>23</sup>

Roseville was not named as an entity until the designation was applied to the Central Pacific Station established in 1864. Previously, the place names of the area referred only to small groups of miners working the gravels of Miner's Ravine, Secret Ravine and Strap Ravine. One version of the naming of Roseville is that the residents of the area chose the name at a picnic, in honor of the most popular girl present.<sup>24</sup>

Roseville slowly developed from a mere railroad station to a town of some size. The surrounding area was used for stock raising, orchards, vineyards and dry agriculture, depending upon the availability of water at a particular locale. Roseville became an important fruit shipping center.<sup>25</sup>

An individual who tried to make a living from the acreage allocated under a homestead soon discovered the marginal nature of the land. The successful individuals would acquire the holdings of neighbors who, becoming less enchanted by a lifestyle subject to the whims of nature and the associated marginal existence, chose to move on to try other occupational pursuits or to relocate in a richer, better watered region.

The best example of the ability to create and run a successful ranch in the region was the Spring Valley Ranch, a tract of 18,200 acres accumulated by J. P. Whitney, west of Rocklin. The tract included the headwaters of Pleasant Grove Creek, one of the drainages that crosses the Plan Area.



Whitney's plans for developing the ranch into a major fruit growing center could never be fully explored due to his failure to satisfactorily solve the water problem.<sup>26</sup>

### **Histories of Properties Within the Plan Area**

The early population of the region was sparse and somewhat scattered. All properties within the Plan Area have undergone a variety of ownerships, with mainly ranching uses. Brief histories have been prepared for four of the properties in the Plan Area; these are summarized below.

#### **Diamond Creek/Eskaton**

The earliest official land owner in the vicinity of the Diamond Creek property was Isaac Newton Webber. In April 1861, Webber received the northwest quarter of the Diamond Creek site (Section 17) as an assignee for William Freemont. In October 1861, Webber also acquired the northeast quarter of the Diamond Creek site from Abner Randall in the same way.<sup>27</sup> Freemont and Randall had received their land as compensation for military services, a policy the United States government had been following since the Revolutionary War. On March 22, 1852, all military patents were made assignable and in California they practically passed for currency until the Homestead Act of 1862 devalued them.<sup>28</sup>

The southern half of the Diamond Creek property remained unclaimed in the 1860s, most likely because it sat on the flood plain of Pleasant Grove Creek. By an 1849 act of Congress, the federal government ceded this type of land to the State as "swamp and overflowed" for the State to improve it for future sale. In 1871 California began improvements on this piece of land, most likely preparing it for sale.<sup>29</sup>

#### **Mourier 140**

The earliest official land owner in the northwest portion of the Mourier 140 property was Albert Woodruff, who received the southern portion of the property as an assignee for James Ritson's military patent in May 1861. Several months later, in December 1861, Curtis Woodruff, probably Albert's brother, purchased the an area in the northwest portion of the Mourier 140 property.

#### **Walaire 160**

The land in the southeast portion of the property remained in the hands of the State, as seminary lands, through at least 1871. In 1853, the federal government gave California grants of public land to further the State's educational programs. This land included the grant of two sections, the 16th and the 36th, in each township and 72 sections for use of "a seminary of learning". In most cases, the State sold this property to raise money for the school system. The land in the Walaire 160 site was most likely sold some time after its seminary designation in 1871,<sup>30</sup> and was used as grazing land for livestock thereafter.

### **Existing Cultural Resources Within the Plan Area**

In preparation for this analysis, Peak & Associates, Inc. conducted cultural resource of the five properties that comprise the Plan Area. Peak & Associates, Inc. conducted literature searches for the entire Plan Area, reviewed previously prepared cultural resource reports, and examined historic maps. The resulting reports are: the Walaire 160 Property, the Diamond Creek Property (including Eskaton), and the Roseville 140 Property, and Two Properties in the Northwest Roseville (regarding Woodcreek West and Woodcreek North).

Previous archeological investigations have been conducted to the north of the Plan Area (Archeo-Tec 1989), west (Peak & Associates, Inc., 1994), south (Peak & Associates, Inc., 1991), and east (Foster and Foster 1982). Four prehistoric period archeological sites and historic archaeological sites are located within a one mile radius of the Plan Area. Several prehistoric and historic period isolated artifacts have also been discovered in the immediate area.

These investigations resulted in the identification and recordation of two recorded archaeological and/or historic sites within the Plan Area. Described below are the cultural resources identified within the Plan Area. This analysis is based upon the results of the Peak & Associates, Inc. cultural resource reports as well as work performed by others.

#### **Recorded Sites**

Two sites have been recorded in the Plan Area, on the Diamond Creek and Walaire 160 properties. According to Peak & Associates, these two sites may contain sufficient physical characteristics to qualify as "eligible" for the National Register of Historic Places (see Regulatory Setting, below). No sites have been identified in the remaining three properties.

##### **CA-PLA-138**

Prehistoric period site CA-PLA-138 was originally recorded in June of 1963, identified by the presence of broken bowls, pestles and rocks found in bottom of Creek. In 1981, Foothill Archaeological Services performed a survey of the proposed Roseville-Rocklin West Sewer Assessment District, a portion of which was located along the eastern boundary of the Walaire 160 site.<sup>31</sup> Backhoe test trenches were excavated in 1994 to determine whether subsurface resources were present at site CA-PLA-138. The excavation revealed artifactual material, such as lithic waste from the manufacture of stone tools and a fragment of bowl mortar.

##### **CA-PLA-429**

Archeological site CA-PLA-429, recorded by Foothill Archaeological Services in 1981, has been relocated and extended during the most recent field survey conducted by Peak & Associates, Inc. Consistent with the observation offered by Foothill Archaeological Services in 1981, no area of darker colored sediment could be discerned within the identified site area located along the boundary of the Walaire 160 and Diamond Creek properties. In 1994, Peak & Associates excavated six backhoe test trenches, but did not find any subsurface artifacts.



### 4.6.3 REGULATORY SETTING

The treatment of cultural resources is governed by national, state and local laws and regulations. There are specific criteria for determining whether prehistoric and historic sites or objects are significant and/or protected by law. Federal and State significance criteria are concerned with the resource's integrity and uniqueness, its relationship to similar resources, and its potential to contribute important information to scholarly research. Local laws tend to focus on a resource's relationship to local history. Some resources that do not meet federal significance criteria are considered significant according to State or local criteria. The federal and State regulations that apply to the Proposed Project are discussed below.

Under the Section 106 of the National Historic Preservation Act, the National Register of Historic Places is the United States' official list of cultural resources that are worthy of preservation. The National Register includes districts, sites, buildings, structures and objects with local, regional, state, or national significance.<sup>32</sup> The definition of historic property includes "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register."<sup>33</sup> This definition also applies to artifacts, records and remains. The criteria for listing on the National Register are:<sup>34</sup>

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

- A. are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. are associated with the lives of persons significant in our past; or
- C. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. have yielded, or may be likely to yield, information important in prehistory or history.

State law also protects cultural resources, by requiring that prehistoric and historic resources be evaluated for significance when a CEQA document is prepared. Under CEQA, a cultural resource is considered significant if it meets any of the criteria found in Appendix K:

- A.1 Association with an event or person of recognized significance in California or American history;
- A.2 Association with an event or person of recognized scientific importance in prehistory;
- B. Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable or archaeological research questions;
- C. Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;

- D. Is at least one hundred years old and possesses substantial stratigraphic integrity; or
- E. Involves important research questions that historical research has shown can be answered only with archaeological methods.

The California Office of Historic Preservation (OHP) maintains the California Archaeological Inventory through 11 Information Centers throughout the state. The North Central Information Center (NCIC), which has the Plan Area within its jurisdiction, is a repository for archaeological site records and other information on cultural resources, including the National Register of Historic Places (National Register) and the California Inventory of Historic Resources (CIHR) and Points of Historic Interest lists. Upon request, the NCIC conducts searches of its records to determine whether any cultural resources are known to exist in or near the subject property. NCIC searches were performed for all of the seven sites comprising the Proposed Project.

The CEQA Guidelines Appendix K recommends methods for reducing or eliminating impacts on cultural resources, states:<sup>35</sup>

- I. CEQA applies to effects on historic and prehistoric archaeological resources.
- II. Public agencies should seek to avoid damaging effects on an archaeological resource whenever feasible. If avoidance is not feasible, the importance of the site shall be evaluated using the criteria outlined in Section III.
  - A. In-situ preservation of a site is the preferred manner of avoiding damage to archaeological resources. Preserving the site is more important than preserving the artifacts alone because of the relationship of the artifacts to each other in the site provides valuable information that can be lost when the artifacts are removed. Further, preserving the site keeps it available for more sophisticated future research methods. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
  - B. Avoiding damage may be accomplished by many approaches, including:
    - 1. Planning construction to miss archaeological sites;
    - 2. Planning parks, greenspace, or other open space to incorporate archaeological sites;
    - 3. "Capping" or covering archaeological sites with a layer of soil before building tennis courts, parking lots, or similar facilities. Capping may be used where:
      - a. The soils to be covered will not suffer serious compaction;
      - b. The covering materials are not chemically active;
      - c. The site is one in which the natural processes of deterioration have been effectively arrested; and
      - d. The site has been recorded.
    - 4. Deeding archaeological sites into permanent conservation easements.

#### 4.6.4 IMPACTS

The impacts of the Proposed Project are measured against existing conditions, which are primarily undeveloped grasslands, creeks and riparian areas. It should be noted that two of the properties in Phase I, Diamond Creek and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impact analysis does not assume development of these light industrial designations, it can be considered a "worst-case" analysis. That is, if the Proposed Project were compared to developing the Plan Area under existing entitlements, the impacts would be less severe than those identified below.

##### Method of Analysis

In addition to consultation with the North Central Information Center at California State University Sacramento, previous environmental documents for projects in the area have been reviewed, and full cultural resource field surveys have been conducted for all five properties that comprise the Plan Area. Areas of historic or prehistoric concern, particularly those where construction could occur as a result of NRSP development have been identified, based on the work previously done by Peak & Associates, Inc. for the Plan Area. These areas have been described and mapped in a manner which, although not identifying individual sites, will point to generalized geographic areas of high presence of these resources. The proximity of potential development areas to cultural resources have been identified. If NRSP development could occur on or near a cultural resource, measures for avoiding and/or recording the resource prior to excavation are discussed.

The standards for cultural resources are found in State law and the CEQA Guidelines. Selection of a site would be considered to have a significant impact if one of the following could occur:

- Damage to or destruction of prehistoric sites or artifacts that could meet CEQA criteria for significance; or
- Damage to or destruction of historical structures, features, artifacts, or sites that could meet CEQA criteria for significance.

A significant cultural resource is one that meets one of the following CEQA Appendix K criteria presented in the Regulatory Setting portion of this section.

##### PHASE I IMPACTS

|                               |                                                                             |
|-------------------------------|-----------------------------------------------------------------------------|
| <b>IMPACT 4.6-1(A):</b>       | <b>Damage or destroy unidentified cultural resources.</b>                   |
| <b>SIGNIFICANCE:</b>          | Significant                                                                 |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.6-1 (Cease work and consult a qualified archaeologist) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                       |



Development in Phase I could expose previously undiscovered archaeological resources during construction activities. Cultural resources exposed during construction, excavation, or related project activities could be damaged, destroyed, or removed from their cultural context. Because the traditional Nisenan culture was so thoroughly decimated by the end of the century, the only hope of preserving this information rests on archaeological techniques. Therefore, impacts on previously undiscovered archaeological resources are considered significant.

Under Mitigation Measure 4.6-1, work shall cease if an unidentified historic surface or subsurface archaeological resource is discovered during construction, and an archaeologist shall be engaged to determine the significance of the resource. State law specifies steps to be taken when Native American sites or artifacts, or human remains are discovered. Consultation with a qualified archaeologist and compliance with State law would reduce this impact to a less-than-significant level.

|                               |                                                                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.6-2(A):</b>       | <b>Damage or destroy recorded prehistoric sites.</b>                                                                               |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                        |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.6-2(a) (Conduct archaeological testing), 4.6-2(b) (Preserve or record sites, consistent with CEQA Guidelines) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                              |

Development in Phase I has the potential to affect identified prehistoric archaeological site CA-PLA-429, located in both Phase I and II (Walaire 160 and the Diamond Creek properties). Site CA-PLA-429 is in an area designated for open space. Sites in open space areas would not be affected by construction activities, unless they are in the path of a trail or emergency access road, but they could be disturbed by people recreating in the open space area (e.g., hikers, cyclists).

According to the NRSP, site CA-PLA-429 would be preserved in open space, although no specific policy is provided to protect the site. The NRSP does not address specific preservation methods, so additional mitigation is recommended. Avoidance, preservation and/or recordation of these resources would reduce this impact to a less-than-significant level.

## **FULL PROJECT IMPACTS**

|                               |                                                                             |
|-------------------------------|-----------------------------------------------------------------------------|
| <b>IMPACT 4.6-1(B):</b>       | <b>Damage or destroy unidentified cultural resources.</b>                   |
| <b>SIGNIFICANCE:</b>          | Significant                                                                 |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.6-1 (Cease work and consult a qualified archaeologist) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                       |

Full Project development could expose previously undiscovered archaeological resources during construction activities. As discussed above, cultural resources exposed during construction, excavation, or related project activities could be damaged, destroyed, or removed from their



cultural context. Therefore, impacts on previously undiscovered archaeological resources are considered significant.

Mitigation Measure 4.6-1, which requires that work cease if cultural resources are discovered, is recommended to reduce impacts to unidentified resources. Implementation of this measure and compliance with state law would reduce this impact to a less-than-significant level.

|                               |                                                                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.6-2(B):</b>       | <b>Damage or destroy recorded prehistoric sites.</b>                                                                                 |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                          |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measures 4.6-2(a) (Conduct archaeologic testing) and 4.6-2(b) (Preserve or record sites, consistent with CEQA Guidelines) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                                |

Full Project development has the potential to affect identified prehistoric archaeological sites previously mentioned in Phase I as well as CA-PLA-138, located in the Walaire 160 property, and CA-PLA-429, located in both Phase I and II (Diamond Creek and Walaire 160 properties). Currently, site CA-PLA-138 is in an area designated for open space and residential uses. Site CA-PLA-429 appears to be in areas designated for open space, park and residential development. Sites in areas designated for residential development could be damaged or destroyed during excavation, grading or construction. Sites in open space areas would not be affected by construction activities, unless they are in the path of a trail or emergency access road, but they could be disturbed by people recreating in the open space area (e.g., hikers, cyclists).

The NRSP does not address specific preservation methods for either site CA-PLA-138 or CA-PLA-429, so mitigation is recommended. Avoidance, preservation and/or recordation of these resources would reduce this impact to a less-than-significant level.

## **4.6-5 MITIGATION MEASURES**

### **UNIDENTIFIED CULTURAL RESOURCES**

#### **Mitigation Measure 4.6-1: Cease work and consult a qualified archaeologist.**

Mitigation Measure 4.6-1 applies to Impacts 4.6-1(A) and (B).

In the event of the discovery of buried archaeological deposits it is recommended that project activities in the vicinity of the find should be temporarily halted and a qualified archaeologist consulted to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations.

**RECORDED ARCHAEOLOGICAL SITES**

**Mitigation Measure 4.6-2(a): Conduct archaeological testing.**

**Mitigation Measure 4.6-2(b): Preserve or record sites, consistent with CEQA Guidelines.**

Mitigation Measures 4.6-2(a) and (b) applies to Impacts 4.6-2(A) and (B).

Prior to any grading, excavation, or construction within the boundary of the archaeological site CA-PLA-138 (defined on Maps 2 and 3 in the "Site Boundary Definition of Archaeological Sites CA-PLA-138 and CA-PLA-429" report prepared by Peak & Associates, Inc. on September 1, 1994, and contained in the confidential Cultural Resource Appendix to this document), a qualified archaeologist shall conduct archeological testing to obtain data that would address the issue of site importance under CEQA. For archaeological site CA-PLA-429, a qualified archaeologist shall be present during the initial site grading of the area as defined on Map 4 (site definitions also contained in the above-referenced report). The monitoring of the grading activity shall be within an area 50 feet in width (25 feet north and south of the existing dirt road) and 50 feet in length (beginning at the eastern edge of the border of the parcel). This area of monitoring encompasses 2,500 square feet, or 0.06 acres.

Under CEQA guidelines, archeological sites CA-PLA-138 and CA-PLA-429 could be simply avoided or capped (after the accurate extent of the sites are known) as outlined in *Supplementary Document J*, Section II-B, without any assessment of whether or not the sites are "important archaeological resources".

If site CA-PLA-138 or CA-PLA-429 is found to be significant under CEQA, and it is to be destroyed, the site shall be fully recorded by a qualified archaeologist.

| <b>TABLE 4.6-1</b>                                                |                        |                             |
|-------------------------------------------------------------------|------------------------|-----------------------------|
| <b>CULTURAL RESOURCES RESIDUAL IMPACT SUMMARY TABLE</b>           |                        |                             |
| <b>Impact</b>                                                     | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
| 4.6-1(A and B) Damage or destroy unidentified cultural resources. | Less than significant  | Less than significant       |
| 4.6-2(A and B) Damage or destroy recorded prehistoric sites.      | Less than significant  | Less than significant       |

## ENDNOTES

1. Elston, Robert G. 1971 A Contribution to Washo Archeology. *Nevada Archaeological Survey Research Papers* 2:1-144. Reno.  
  
1972 *The Steamboat Assemblage and its Relationship to the Martis Complex*. Paper Presented at the Annual Meeting of the Society for California Archaeology and the Southwestern Anthropological Association, Long Beach.  
  
Elston, Robert G., and Jonathan O. Davis 1972. An Archeological Investigation of the Steamboat Springs Locality, Washoe County, Nevada. *Nevada Archeological Reporter* 6(1):9-14. Reno.  
  
Elston, Robert, and J.O. Davis, A. Leventhal, and C. Covington, 1977. The Archaeology of the Tahoe Reach of the Truckee River. Ms., Tahoe-Truckee Sanitation Agency, Reno.  
  
Elston, Robert, and J.O. Davis, and G. Townsend, 1976. An Intensive Archaeological Investigation of the Hawkins Land Exchange Site (FS-05-17-57-33), 4-Nev-184. Ms., Tahoe National Forest, Nevada City.
2. Jewell, Donald P. 1964. Archaeology of the Oroville Dam Spillway. *Department of Parks and Recreation Archaeological Reports* 10(1). Sacramento.  
  
Olsen, William H., and Francis A. Riddell 1963. The Archeology of the Western Pacific Railroad Relocation: Oroville Project, Butte County, California. *California State Department of Parks and Recreation, Archaeological Reports* 6.  
  
Ritter, Eric W. 1968. *Cultural History of Tie Wiah (4-But-84), Oroville Locality, California*. M.A. Thesis, Department of Anthropology, University of California, Davis. and Northern Sierra Foothills Archaeology: Cultural History and Cultural Process. *University of California, Center for Archaeology Research at Davis, Publications* 2:17-184. Davis.
3. Crew, Harvey L. 1970. Preliminary Report: 4-PLA-36. In *Archaeological Investigations in the Auburn Reservoir Area, Phase II-III*, edited by E. W. Ritter, pp. 275-280. Ms., National Park Service, San Francisco.
4. Ritter, Eric W., ed. 1970. *Archaeological Investigations in the Auburn Reservoir Area, Phase II-III*. Ms., National Park Service, San Francisco.
5. Ritter, Eric W. The Archaeology of 4-PLA-101, the Spring Garden Ravine Site. In *Archaeological Investigations in the Auburn Reservoir Area, Phase II-III*, Edited by E.W. Ritter, pp. 270-538. Ms., National Park Service, San Francisco.
6. Wilson, Norman L., and Arlean Towne 1978. Nisenan. In Handbook of North American Indians (vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C.



7. Riddell, Francis A. 1978. Maidu and Konkow. In Handbook of North American Indians (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., page 387.
8. Wilson, Norman L., and Arlean Towne 1978. Nisenan. In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C.
9. Kroeber, Alfred L. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Smithsonian Institution, Washington, D.C.
10. Wilson, Norman L., and Arlean Towne 1978. Nisenan. In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C. Figure 1.
11. Wilson, Norman L., and Arlean Towne 1978. Nisenan. In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., page 389.
12. Wilson, Norman L., and Arlean Towne 1978. Nisenan. In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., page 389.
13. Davis, James T. 1974. Trade routes and economic exchange among the Indians of California, edited by Robert F. Heizer. Ballena Press Publications in Archaeology, Ethnology and History 3. Ramona, page 38.  
  
Freed, Stanley A. 1966. Washoe habitation sites in the Lake Tahoe area. In Notes on western Nevada archaeology and ethnology. University of California Archaeological Survey 66(3). Berkeley, page 78.
14. Wilson, Norman L., and Arlean Towne 1978. Nisenan. In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., page 396.
15. Wilson, Norman L., and Arlean Towne 1978. Nisenan. In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., page 388 citing Payen, 1961.
16. Cook, 1955.
17. Chartkoff and Chartkoff, 1984:279-282; Powers, 1877:317; Wilson and Towne, 1978:396.  
  
Wilson, Norman L., and Arlean Towne 1978. Nisenan. In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., page 396.
18. Du Bois, 1939; Kroeber, 1932.

19. Beck and Haase, 1974; McGowan, 1961.
20. Beck and Haase, 1974.
21. Bean, 1977; Lavender, 1972; McGowan, 1961.
22. Davis, 1964:11-15.
23. Davis, 1964:11-15, 17.
24. *Sacramento Bee*, October 20, 1931.
25. Gudde, 1975:273.
26. Miller, 1969.
27. General Land Office Patents.
28. Robinson, 1948:181-82.
29. Robinson, 1948:192; GLO Patents.
30. Robinson, 1948:190; GLO Patents.
31. Foster and Foster 1981.
32. California Office of Historic Preservation. *Historic Preservation in California: A Handbook for Local Communities*, December 1986.
33. Advisory Council on Historic Preservation, *Fact Sheet: Working with Section 106*. Citation from 36 CFR §800.2(e).
34. 36 CFR Section 60.4, cited in Advisory Council on Historic Preservation, 1986b.
35. Governor's Office of Planning and Research, 1992:228-229.





---

---

## ***4.7 AESTHETICS AND VISUAL RESOURCES***

---

---



---

---

## **4.7 AESTHETICS AND VISUAL RESOURCES**

---

---

### **4.7.1 INTRODUCTION**

This section evaluates the relationship between the existing visual characteristics of the Plan Area, and the potential visual features of the proposed future development under the proposed NRSP. While land use designations have been applied to all land in the Plan Area, the exact nature of the projects under the NRSP is not known at this time; therefore, this evaluation of visual resources is general in nature. Specific uses or building designs are not analyzed; rather, the general visual effects of development under the NRSP are described. Topics include the potential loss of visual resources, effects on views, compatibility with the visual characteristics of surrounding uses, and the likelihood that sensitive receptors will be disturbed by light and glare generated or reflected by new structures.

Both Phase I and Phase II (Full Project) are evaluated using the site's existing conditions as the baseline scenario to evaluate the "worst case" impact.

### **4.7.2 ENVIRONMENTAL SETTING**

Figure 4.7-1 identifies the locations from which the photographs in this section were taken.

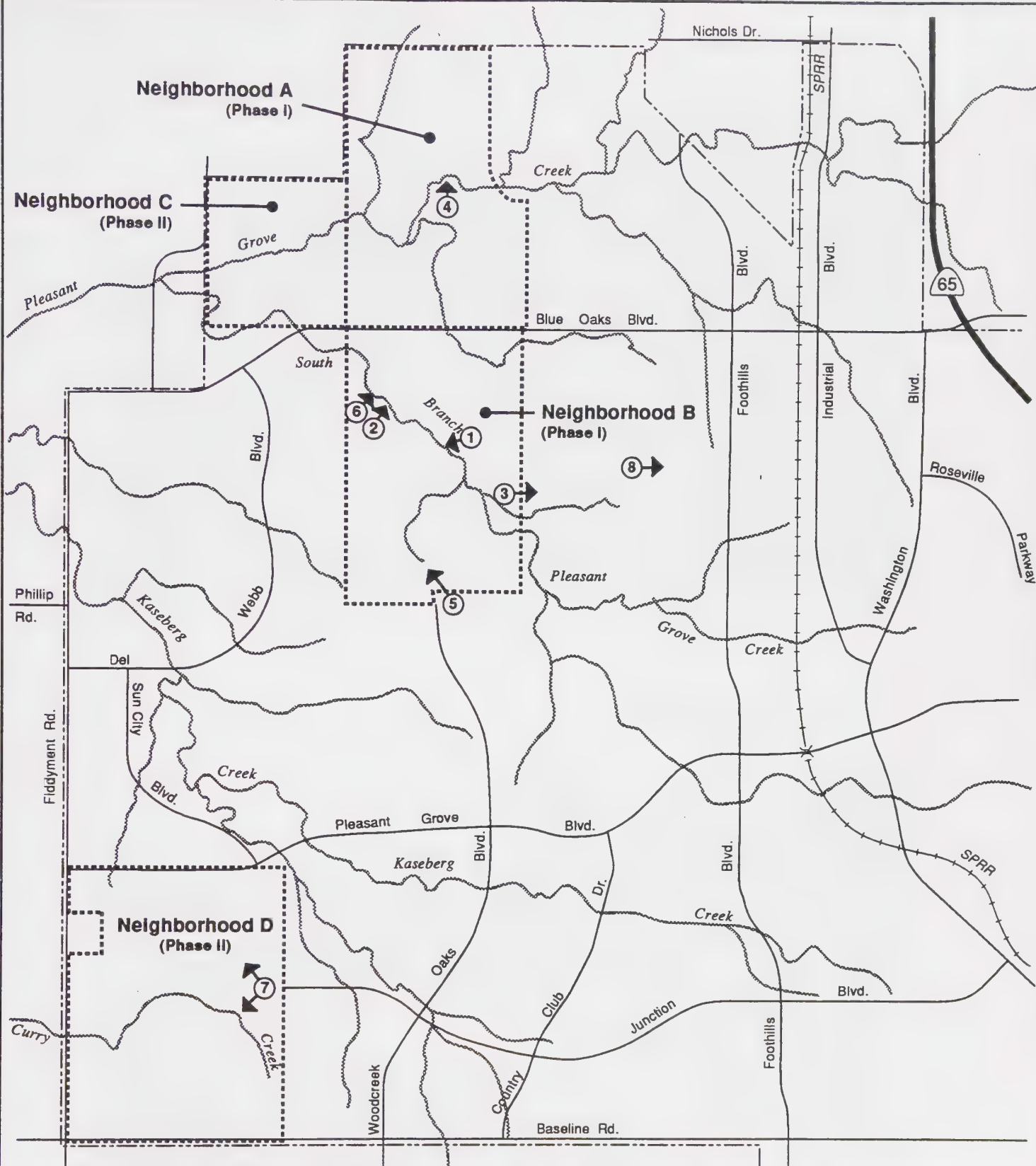
#### **Regional Visual Resources**

The Roseville vicinity is generally regarded as a transitional zone between the flat, open terrain of the Central Valley and the foothills of the Sierra Nevada Mountains. The region consists of rolling topography with gentle slopes; major drainages typically drain the area from east to west. Oak woodlands are scattered throughout the region and constitute an important factor in regional identity. The oak woodlands, together with scattered riparian vegetation adjacent to drainages (see Figure 4.7-2 and 4.7-3), accentuate the ridgeling/drainage patterns found in the landscape and create a strong contrast to the surrounding grassland. This contrast is especially evident during the seasonally dry summer and fall months when earth-tone colors dominate landscape views.

Vernal pools are also an important aesthetic component of the regional landscape (see Figure 4.7-3). The flower production and expanded color contrast associated with the pools provide additional landscape interest, even though the contrast and color are seasonally limited. The aesthetic value of vernal pools is also an important factor in the regional identity of the valley/foothills zone. Human-made development, which has become an important component of the landscape character, is evident throughout the region and reflects a variety of residential, commercial and industrial land uses. Development in some areas has completely eliminated historically rural character associated with regional ranching and agricultural operations. In many







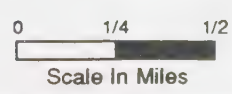
- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Streamcourses/Creeks

SOURCE: EIP Associates, May 1997.

- ① Figure 4.7-2 Oak Woodlands (Mourier 140)
- ② Figure 4.7-3 Vernal Pools (Woodcreek North)
- ③ Figure 4.7-4 Grasslands Typical of Plan Area and Vicinity
- ④ Figure 4.7-6 Cattle and Vehicle Erosion of Pleasant Grove Creek (Diamond Creek)
- ⑤ Figure 4.7-7 Cattail-Filled Drainage Ditch (Woodcreek West)
- ⑥ Figure 4.7-8 Vernal Pool and Wetlands (Woodcreek North)
- ⑦ Figure 4.7-9 High-Voltage Transmission Lines (Woodcreek West)
- ⑧ Figure 4.7-10 Views of Hewlett-Packard

**Figure 4.7-1**

**Key Map of Photographs**









**Figure 4.7-2 - Oak Woodlands (Mourier 140)**



**Figure 4.7-3 - Vernal Pools (Woodcreek North)**



other locations, development has segmented the remaining natural areas, thereby heightening the aesthetic value of remaining contiguous open space.

Long-range views within the region include numerous important landmarks and landscape features, including portions of the Sierra Nevada, Sutter Buttes, Mount Diablo, and the Coast Range. No prominent landscape features or areas of unique scenic quality have been identified in the regional vicinity of the Proposed Project. In addition, the Roseville General Plan 2010 and the Placer County General Plan do not identify any roadways in the vicinity of the Proposed Project as Scenic or Community Identified Corridors requiring special considerations for adjacent development or rights-of-way landscaping.<sup>1</sup> Baseline Road and SR 65 had previously been identified as special corridors in the Scenic Element of the prior Roseville General Plan, but the updated General Plan does not specifically address the corridors.<sup>2</sup>

## **Plan Area Setting**

### **General Description**

The Plan Area and surrounding vicinity is comprised primarily of rolling grasslands (see Figure 4.7-4) and oak woodland, transected by Pleasant Grove Creek and the South Branch of Pleasant Grove Creek. During late winter and spring, the site is carpeted with green grasses, wildflowers and lush green oaks. During summer the grasses turn brown and greenery is concentrated in the riparian habitat along the creeks. The topography varies only slightly, by approximately 25 feet. Many of the properties comprising the Plan Area are used as pasture land for cattle, and provide a picturesque panorama of grazing cattle, grassland, and drainage swales. Other properties are vacant, although all have previously been used as farmland. This is evident by the occurrence of dilapidated farming structures such as standing turkey sheds, and fallen wooden out-buildings. Many properties are surrounded with barbed wire fences with metal "t" posts and occasional wooden posts, used for enclosing cattle in the grazing land. Figure 4.7-5 illustrates the general visual characteristics of the Plan Area and vicinity.

### **Pleasant Grove Creek Corridors**

The Plan Area is transected by Pleasant Grove Creek, the South Branch of Pleasant Grove Creek, and various tributaries and drainages emptying into the Pleasant Grove Creek system. Pleasant Grove Creek and its south branch is surrounded by vegetation consisting of riparian habitat and oak woodland (see Figure 4.5-1, in Section 4.5, Biology). The creekbeds are both narrow with steep, tree-crowded banks, and intermittently, wide with smooth banks gently easing into the creekbeds. The banks are eroded by cattle crossings at various locations along the creek (see Figure 4.7-6). The banks also serve to illustrate recent flooding, with strong cuts, fallen trees, and bare roots exposed. Natural drainage swales transect the Plan Area, leading into the Pleasant Grove channel. A cattail-filled drainage canal can be seen in Figure 4.7-7, illustrating the drainage patterns that appear in the Plan Area. A major channel located in the Diamond Creek property has a deposit of a large pile of cement piers reinforced with wire. These piers had been foundation footings for an unknown structure. A small dam and reservoir and a few excavated depressions forming an artificial wetland and vernal pools exist along the South Branch of Pleasant Grove Creek in the Woodcreek North property (see Figure 4.7-8). One property with visible structures is Diamond Creek, where four ranch-type buildings remain.







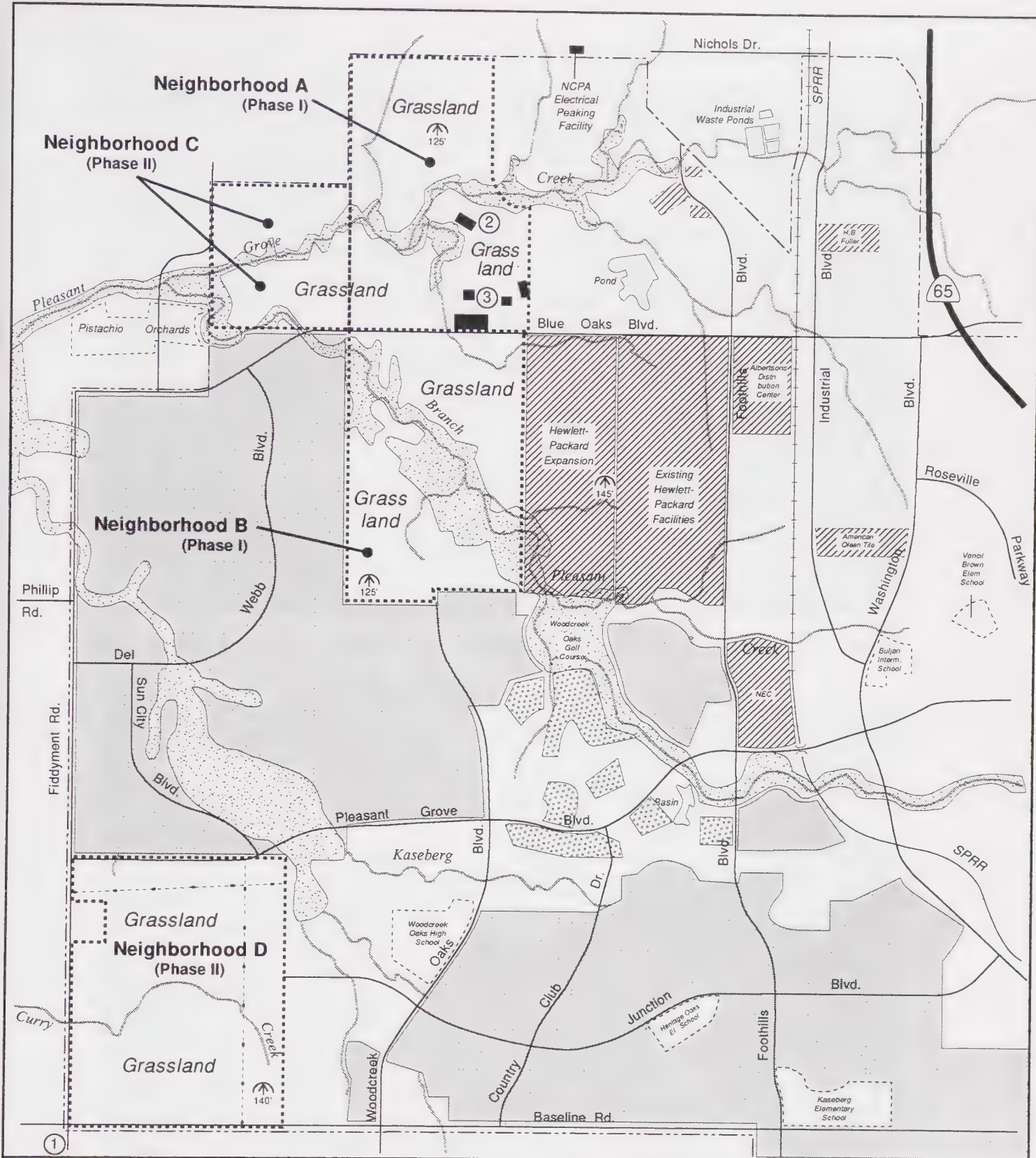
**Figure 4.7-4**

**Grasslands Typical Of Plan Area And Vicinity**

96063







**# KEY**  
 1 Radio Tower  
 2 Turkey Shed  
 3 Turkey Sheds

..... Neighborhood Boundary Within Specific Plan Area  
 --- Roseville City Limits  
 --- Existing and Approved Roads  
 --- Streamcourses/Creeks  
 --- Electrical Transmission Lines

Urban Development and/or Graded Land  
 Business/Light Industrial  
 Woodland and Riparian Habitat  
 Isolated Oak Trees  
 High Point

**Figure 4.7-5**

### Illustration of Plan Area Characteristics

0 1/4 1/2  
 Scale In Miles



96063  
 Base



SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996;  
 EIP Associates, May 1997.







**Figure 4.7-6 - Cattle Erosion of Pleasant Grove Creek (Diamond Creek)**



**Figure 4.7-7 - Cattail Filled Drainage Ditch (Woodcreek West)**







**Figure 4.7-8 - Vernal Pool and Wetlands (Woodcreek North)**



**Figure 4.7-9 - High Voltage Transmission Lines (Woodcreek West)**





The Woodcreek West property is transected from the north to the south by high-voltage transmission lines (see Figure 4.7-9).

### Surrounding Areas

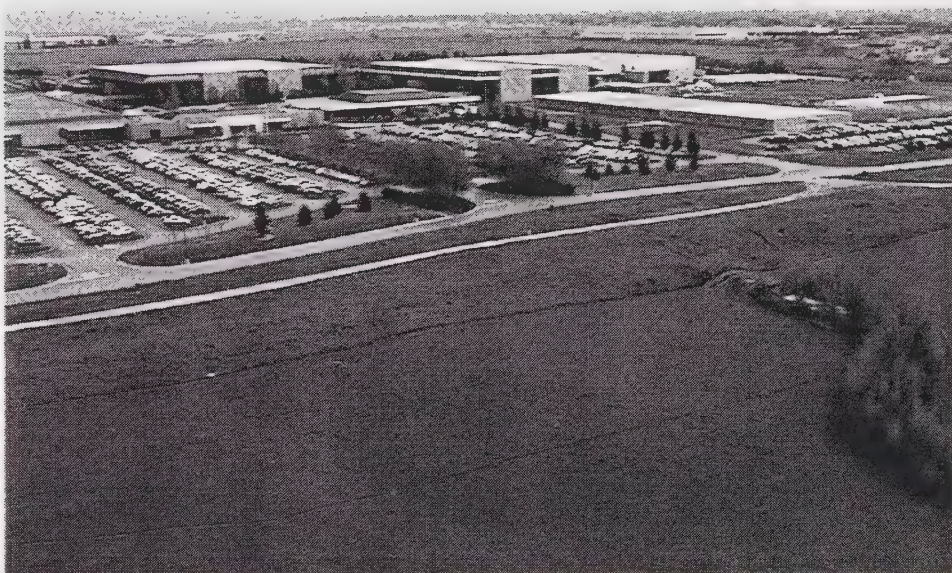
The areas surrounding the Plan Area consist mostly of rolling grasslands, and residential, light industrial and business developments. The area north of the Plan Area consists of rolling grasslands, historically used for grazing. To the northeast lies the Western Regional Sanitary Landfill approximately one mile from the Plan Area, but not visible from the Plan Area itself. Several industrial operations and businesses exist to the east of the Plan Area, including Hewlett Packard, Ace Hardware, Reynolds Metals, Roseville Telephone, the Albertsons Distribution Center, and NEC. These facilities provide a distinct contrast to the surrounding grassland. Farther to the east, the homes and other development of the City of Rocklin and the Stanford Ranch development are visible from several vantage points in the Plan Area. To the northeast a cogeneration plant and the Sierra Nevada foothills can be viewed. To the southeast of the Plan Area lies the Northwest Roseville Specific Plan Area, consisting of residential neighborhoods and commercial development, and old town Roseville. The Del Webb Specific Plan Area, consisting primarily of single-family homes lies to the west of the Phase I area, between the west and south Urban Reserve Areas. Single and two-story homes and a golf course exist to the south of the Plan Area. Southwest of the Plan Area are rural residential homes, some with backyard farms and open, undulating grassland. West of the Plan Area lies gently rolling grassland, and farther west, the Sacramento Basin.

### Views

Long-distance views from the Plan Area include the Sierra Nevada Foothills to the east. Snow-covered mountain tops are visible from the fall and into the spring, turning a faint brown in summer. The Foothills are easily viewed on clear days, although clouds, fog, and haze mute the view. Middle-distance views from the Plan Area include land similar to itself to the north and east, and encompass the City of Rocklin and the Stanford Ranch development, and the City of Roseville to the southeast. Industrial operations and businesses, including Hewlett-Packard and the Albertsons Distribution Center, also are located to the east. Views of these industrial and business facilities include large, functional buildings with ground-level parking. While the buildings may be single-story, the height on buildings such as the Albertson's Distribution Center is substantial, making it easier to view from the Plan Area. Albertson's Distribution Center loads trucks along its west wall, readily visible to views from the east, such as the Plan Area.

Immediate views to the east from the Mourier 140 property include the Hewlett-Packard facility which consists of one to four-story large floorplan buildings with surface parking lined with tree borders. Figure 4.7-10 provides a "birds-eye" view of the HP campus, and illustrates the type of development for the HPMP area adjacent to Mourier 140. Northern immediate views from the Diamond Creek property includes a cogeneration plant and fields and riparian habitat similar to the Plan Area. The Del Webb residential development, currently under construction, lies south and west of the Walaire 160 property, north of the Woodcreek West property, and is easily viewed from all locations. The Del Webb development consists of single-family homes, one to





**Figure 4.7-10**  
**View of Hewlett-Packard**

96063







two stories in height. A microwave tower is visible to the southeast from the Woodcreek West property. Also visible to the south of the Woodcreek West property are ranchette-styled houses with small farming operations. The Woodcreek Oaks High School lies to the east of the Woodcreek West properties and is within viewing distance.

### **4.7.3 REGULATORY SETTING**

The Roseville General Plan does not specify policies or elements that stipulate protection of or sensitivity to visual resources, but instead generally addresses visual resources through "aesthetics" references related to high-quality design, distinctive development or community character, public artistic expression, and incorporation and/or preservation of natural features (such as at Roseville "gateway" locations). Promotion of the preservation of "visual environments" is the most direct statement of visual resource protection in the General Plan, and is found in the Community Design section of the Land Use Element.

#### **Community Guidelines**

The City of Roseville adopted the Community Design Guidelines on December 6, 1995. The purpose of these Guidelines is to "implement the goals and policies of the Community Form and the Community Design components of the Roseville 2010 General Plan" (City of Roseville, 1995). The Guidelines provide a clear understanding of the City's expectations regarding site design, architecture, lighting, and, applicable, artwork. The City's Specific Plans each include design guidelines more restrictive or detailed than the City Guidelines and would supplement the City's Guidelines. Design Guidelines for Specific Plan areas in the City include: Del Webb Development Guidelines, Northwest Roseville Design Guidelines, North Central Roseville Design Guidelines, Northeast Roseville Design Guidelines, Southeast Roseville Design Guidelines. Although not a specific plan area, Design Guidelines have been developed for the North Industrial area as well.

#### **North Roseville Area Design Guidelines**

The City of Roseville adopted the North Roseville Area Design Guidelines in June 1992, which provide standards and guidelines for non-residential development in the North Roseville area. The guidelines address roadway landscaping, entry points, edge treatments at adjoining sensitive land uses (such as residential), and unique existing conditions (e.g., 100-year flood zones, oak woodland). Coverage restrictions, setbacks, grading requirements, fencing and screening standards, landscape guidelines, sign guidelines, and height, mass and form standards are intended to minimize the visual impact of development in the North Roseville area. These design standards and guidelines will be applied to the commercial and business-professional uses in the Plan Area.

#### 4.7.4 IMPACTS

The impacts of the Proposed Project are measured against existing conditions, which are primarily undeveloped grasslands, creeks and riparian areas. It should be noted that three of the properties in Phase I, Diamond Creek, Eskaton, and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impact analysis does not assume development of these light industrial designations, it can be considered a "worst-case" analysis. That is, if the Proposed Project were compared to developing the Plan Area under existing entitlements, the impacts would be less severe than those identified below.

##### **Method of Analysis**

The positive or negative value attached to changes in visual character is largely subjective. This EIR does not seek to assign a judgement of "good" or "bad" change; rather, it identifies any substantive change as significant.

A description of the Plan Area has been constructed from visits to the Plan Area, aerial oblique photographs, site photographs, and topographic maps. The City General Plan, as well as other applicable planning documents, were reviewed to determine what visual elements have been deemed valuable by the community. Once the character of the Plan Area has been established, the analysis focuses on the manner in which development could change the visual elements or features that exist on or near the Plan Area.

This analysis assumes that the Proposed Project would comply with the City's General Plan policies, Improvement Standards and Design Standards. Therefore, such policies and standards are not identified as mitigation.

##### **Standards of Significance**

For the purpose of this EIR, a significant impact was identified if the Proposed Project could:

- Substantially change the existing visual character (day or night) of the site, including alterations to the natural terrain or topography;
- Add structures that could disrupt views from public spaces, such as parks and scenic highways, of surrounding agricultural lands, and important nearby features;
- Introduce uses that are visually incompatible with existing or planned uses in areas that have visual access to the Plan Area; or
- Create new sources of light and/or glare that would directly illuminate adjacent and nearby residences or public uses.



**PHASE I IMPACTS**

|                               |                                                                  |
|-------------------------------|------------------------------------------------------------------|
| <b>IMPACT 4.7-1(A):</b>       | <b>Conversion of undeveloped landscape to urban development.</b> |
| <b>SIGNIFICANCE:</b>          | <b>Significant</b>                                               |
| <b>MITIGATION MEASURE:</b>    | <b>None identified</b>                                           |
| <b>RESIDUAL SIGNIFICANCE:</b> | <b>Significant</b>                                               |

Implementation of Phase I would urbanize a large segment of the undeveloped landscape that used to dominate South Placer County. The visual character of the Plan Area is dominated by open, rolling grasslands, and is visible from a variety of viewpoints, some well-travelled, such as parts of SR 65. The areas east and south of the Plan Area have been developed in residential and light industrial uses. To a certain extent, development of the Plan Area would be an extension of this urban edge. Nonetheless, Phase I of the Proposed Project would substantially and permanently alter the visual character of the Plan Area by introducing an extensive roadway network, houses, commercial uses, and other urban facilities into an undeveloped area. This is considered a significant impact.

Phase I would retain approximately 81.5 acres of open space (see Chapter 3, Project Description). The areas designated for open space and park uses encompass a majority of the riparian and oak woodlands along both Pleasant Grove Creek and the South Branch of Pleasant Grove Creek. However, the majority of grasslands on the site would be developed, and the open space areas would be surrounded by development, so that they would lose their undeveloped character.

The visual character of Phase I would be subject to the Roseville Community Design Guidelines, and the NRSP Design Guidelines which address the size, type and treatment of buildings, setbacks, landscaping, and so on. While these standards would beneficially direct the scale and consistency of architecture, as well as the configuration of site improvements and landscaping, they would not preserve the existing character of the site. Therefore, this impact would remain significant.

|                            |                                                                          |
|----------------------------|--------------------------------------------------------------------------|
| <b>IMPACT 4.7-2(A):</b>    | <b>Decrease in visual quality due to removal of riparian vegetation.</b> |
| <b>SIGNIFICANCE:</b>       | <b>Less than significant</b>                                             |
| <b>MITIGATION MEASURE:</b> | <b>None required</b>                                                     |

Although the visual character of the project site is dominated by open grasslands, the riparian corridors that run through the site provide visually significant features and diversity. Phase I proposes to eliminate 12.6 acres of oak woodland and riparian habitat (out of a total in Phase I of 81.8 acres). At the same time, the majority of the woodlands and riparian habitat would be preserved as open space. These retained riparian areas would retain their existing visual character. Because a substantial portion of this visual resource will be retained, this is considered a less-than-significant impact.



|                            |                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------|
| <b>IMPACT 4.7-3(A):</b>    | <b>Visual incompatibility between residential areas and adjacent light industrial uses.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                       |
| <b>MITIGATION MEASURE:</b> | None required                                                                               |

The eastern boundary of Phase I is immediately adjacent to planned light industrial uses, including the Hewlett-Packard Master Plan area. The eastern portion of Phase I would include low, medium and high density residential. In addition, the area north of Neighborhood A (Diamond Creek) could be subject to industrial development under the Placer County Sunset Community Plan.

Light industrial uses can include buildings and facilities that are not visually compatible with residential areas because of buildings that are tall and massive, outdoor storage areas or large, mechanical equipment that are visible from nearby areas, and so on. However, light industrial facilities can be housed in landscaped, campus-like facilities that resemble low-rise, office complexes, or simple, box-shaped structures that house any equipment or related items away from public view (as shown in figure 4.7-10). Compatibility of light industrial uses with residential and other non-industrial uses depends largely on the type of facility and its buildings and grounds. The adjacent Hewlett-Packard facility has adopted a Master Plan that includes specific design guidelines to minimize incompatibility between light industrial and residential uses. In addition, all industrial developments in this portion of the city are required to comply with the North Roseville Area Design Guidelines and the following City of Roseville Community Design policies:

- LG-1. Through the design review process, apply design standards that promote the use of high quality building materials, architectural and site designs, landscaping signage and amenities.
- LG-7. Encourage project designs that place a high priority and value on open space, and the preservation, enhancement, and incorporation of natural resources and other features including consideration of topography, vegetation, wetlands and water courses.

The County also has policies, including buffer requirements that would reduce the potential for visual incompatibility between light industrial and residential uses.

As discussed above, the North Roseville Area Design Guidelines apply to adjacent light industrial uses in the City of Roseville. These design guidelines specify building heights, setbacks, treatments, landscaping and other measures to ensure that non-residential development does not create adverse visual impacts. With implementation of these guidelines and the buffers required by Placer County, this impact would be less than significant.

|                            |                                                                              |
|----------------------------|------------------------------------------------------------------------------|
| <b>IMPACT 4.7-4(A):</b>    | <b>Disturbance of Plan Area residents due to artificial light and glare.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                        |
| <b>MITIGATION MEASURE:</b> | None required                                                                |

Within Phase I, new residential and commercial development would require lights in parking areas and in and around buildings for both safety and convenience. The introduction of artificial light into a rural area contributes to the change in that area's character. In addition, lighting can be a nuisance if it spills into backyards or homes, as it can interfere with sleeping, watching television or other activities. The City of Roseville Community Design Guidelines, and the North Roseville Area Design Guidelines specify that "cut-off" fixtures be used. These fixtures are screened to direct light into specific areas and prevent it from spilling into areas where it is not required. For example, with cut-off fixtures, a security light can be directed entirely toward the parking area and "cut-off" at the fence line. With the use of cut-off lights, the impact on surrounding land uses would be less than significant.

Glare is caused by light reflections from pavement, vehicles and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of existing glare depends upon the intensity and direction of sunlight; at night, artificial lighting can create glare. Particularly in commercial and business/professional areas, windows comprise a large proportion of building surfaces, creating the potential for glare which would increase with the use of reflective coatings and reflective building materials. The problem is most noticeable with large buildings that have reflective surfaces. Residential and small commercial buildings, such as those anticipated under the NRSP, are not likely to be large enough to generate substantial glare. Therefore, this impact is less than significant.

Lighting of parks (athletic fields) and a private horse arena could cause light and glare in adjacent residential neighborhoods. Typically, City parks do not use cut-off fixtures because athletic field lights are only used during games and are shut off after games (usually by 10:30 PM). The lights do not remain on all night long. Lighting of the horse arena would be in excess of 100 feet from adjacent single-family residences. The lights for the arena are intended to light only the arena, not surrounding property, by using cut-off fixtures. All parks in the Plan Area and the horse arena are adjacent to dense oak woodlands. These trees would also help minimize light spillover onto adjacent residential property. The limited duration of park and arena lighting in combination with the fact that all parks within the Plan Area (Phase I) are adjacent to dense oak woodlands limit the impact of light and glare on adjacent residences.

## **FULL PROJECT IMPACTS**

|                               |                                                                  |
|-------------------------------|------------------------------------------------------------------|
| <b>IMPACT 4.7-1(B):</b>       | <b>Conversion of undeveloped landscape to urban development.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                      |
| <b>MITIGATION MEASURE:</b>    | None identified                                                  |
| <b>RESIDUAL SIGNIFICANCE:</b> | Significant                                                      |

Similar to Phase I of the Proposed Project, Phase II would urbanize an additional 653.6 acres that are presently undeveloped for a Full Project total of 1,389.9 acres. As discussed earlier,



development would significantly and permanently alter the visual character of the Plan Area. This is considered a significant impact.

Phase II would retain approximately 111.7 acres in open space and an additional 29.6 acres in parks and pedestrian pathways for a Full Project total of 193.2 acres of open space and 108.8 acres in parks. Similar to Phase I, the open space and park areas would be concentrated along Pleasant Grove Creek or in areas designated with a high degree of biological value. In addition, similar to Phase I, the majority of grasslands that characterize Phase II would be developed so both areas would lose much of their undeveloped character.

As discussed under Impact 4.7-1(A), the visual character of the Full Project would be defined by the Roseville Community Design Guidelines and the NRSP Design Guidelines. These guidelines would help to direct the scale and consistency of the Plan Area's architecture; however, they would not preserve the existing undeveloped character of the site. Therefore, this impact would be significant.

|                            |                                                                          |
|----------------------------|--------------------------------------------------------------------------|
| <b>IMPACT 4.7-2(B):</b>    | <b>Decrease in visual quality due to removal of riparian vegetation.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                    |
| <b>MITIGATION MEASURE:</b> | None required                                                            |

Similar to the discussion under Phase I, the visual character of Phase II is dominated by open grasslands and riparian corridors that run through both portions of the remaining Plan Area. These areas contain visually significant features and contribute diversity to the site. Phase II proposes to eliminate 2.4 acres of oak woodland and riparian habitat for a Full Project total of 15.00 acres out of a total of 100.6 acres of oak woodland and riparian habitat. At the same time, the majority of the woodlands and riparian habitat on the site would be preserved as open space. These areas would retain their existing visual character. Because a substantial portion of this visual resource would be retained, this is considered a less-than-significant impact.

|                            |                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------|
| <b>IMPACT 4.7-3(B):</b>    | <b>Visual incompatibility between residential areas and adjacent light industrial uses.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                       |
| <b>MITIGATION MEASURE:</b> | None required                                                                               |

Phase II of the Proposed Project is not located adjacent to or near any light industrial uses. Please see discussion above under Impact 4.7-1(A) for a discussion of Phase I impacts.

**IMPACT 4.7-4(B):**

**Disturbance of Plan Area residents due to artificial light and glare.**

**SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None required

The Full Project includes new residential and commercial development that would require lights in parking areas and in and around buildings for both safety and convenience. In addition, athletic fields and parks would be lighted at times, although generally not after 10:30 PM. While the impact under Full Project would extend over a larger area, it would be essentially the same as Phase I. Please refer to Impact 4.7-4(A).

**4.7-5 MITIGATION MEASURES**

None required or available.

**TABLE 4.7-1****VISUAL QUALITY RESIDUAL IMPACT SUMMARY TABLE**

| <b>Impact</b>                                                                                       | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
|-----------------------------------------------------------------------------------------------------|------------------------|-----------------------------|
| 4.7-1(A and B) Conversion of undeveloped landscape to urban development.                            | Significant            | Significant                 |
| 4.7-2(A and B) Decrease in visual quality due to removal of riparian vegetation.                    | Less than significant  | Less than significant       |
| 4.7-3(A and B) Visual incompatibility between residential areas and adjacent light industrial uses. | Less than significant  | Less than significant       |
| 4.7-4(A and B) Disturbance of residents due to artificial light and glare.                          | Less than significant  | Less than significant       |



## ENDNOTES

1. City of Roseville, *Comprehensive Land Use Element Update Project Draft Environmental Impact Report*, February 1995.
2. City of Roseville, *Del Webb Specific Plan Environmental Impact Report*, September 1993.

---

---

## ***4.8 HAZARDOUS MATERIALS AND PUBLIC SAFETY***

---

---



---

---

## **4.8 HAZARDOUS MATERIALS AND PUBLIC SAFETY**

---

---

### **4.8.1 INTRODUCTION**

This section describes the potential adverse impacts on human health due to exposure to hazards that could result from the development of the proposed NRSP. Hazards evaluated include those associated with existing identified or suspected contaminated sites, potential exposure to hazardous materials used, generated, stored, or transported in or immediately adjacent to the Plan Area, and potential hazards associated with electromagnetic fields (EMFs). Included in the discussion is a summary of applicable hazardous materials laws and regulations and agencies responsible for their implementation. Potential hazards and associated impacts related to airborne emissions or releases of hazardous materials are discussed in Chapter 4.10, Air Quality.

For purposes of this EIR, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. This EIR uses the definition stated in the California Health and Safety Code (CHSC) § 25501:

A hazardous material is any material that, because of its quantity, concentration, or physical, chemical characteristics poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Both Phase I and the Full Project (Phases I and II combined) are evaluated using the Plan Area's current existing conditions as the baseline against which impacts are measured.

Additional information about hazardous materials and associated potential risks is presented in Appendix F.

### **4.8.2 ENVIRONMENTAL SETTING**

The presence of hazardous materials or other safety hazards is a part of everyday urban life that could affect residents, workers, and visitors within and adjacent to the Plan Area. Some of these activities can pose a risk of exposure to people or the environment due to accidental releases, such as spills, or as a result of soil or groundwater contamination related to past uses of properties within and adjacent to the Plan Area. Transportation of hazardous materials through or near the Plan Area could also present hazards.



The following section discusses existing and proposed land uses that have the potential to result in accidental releases of hazardous materials or present other health risks and identifies existing hazardous materials management programs applicable to the Plan Area. A summary of potential hazards related to the presence of high-voltage electric power lines is also presented.

### **Past and Existing Uses**

Although most of the Plan Area is undeveloped, existing or past uses within or adjacent to the Plan Area could contaminate soil or groundwater, which if not properly managed could affect human health during construction activities or planned uses. Locations of potential and known hazards are shown in Figure 4.8-1 and are discussed below.

### **Undeveloped Properties Within the Plan Area - Preliminary Site Assessments**

Preliminary Site Assessments (PSAs), or Phase 1 Site Assessments, are performed to determine the likelihood of hazardous materials or contamination from on-site or adjacent sources that could present a risk to the public if not identified or properly managed. The assessments generally include the following:

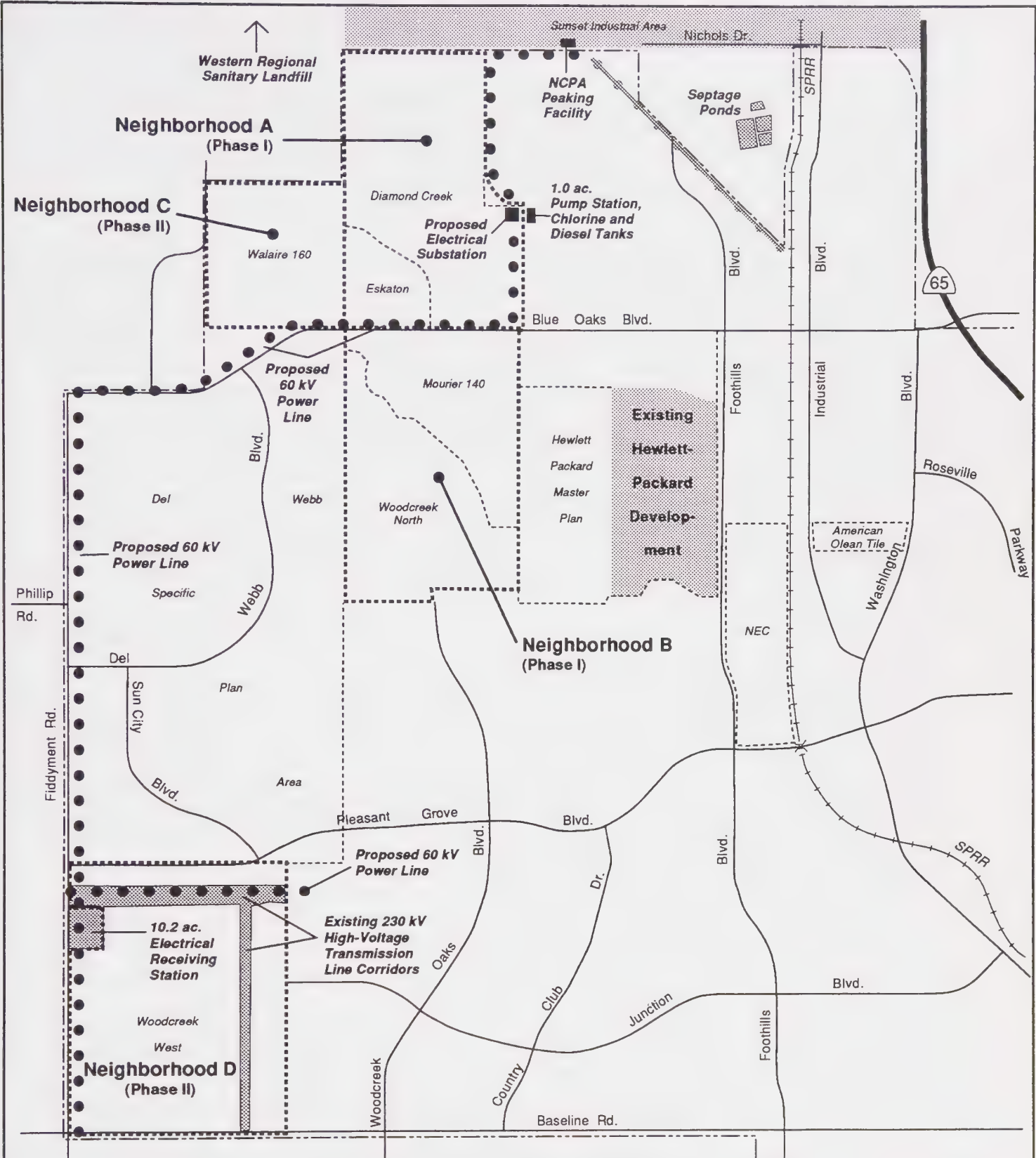
- review and evaluation of information available from State and local agencies,
- site reconnaissance of the property and adjacent areas,
- aerial photograph review, and
- discussions with State and local agency staff.

The following is a summary of information from available assessments that were prepared between 1988 and 1993 for properties within the Plan Area. Information from a PSA prepared for the Del Webb Specific Plan is also included, because the Del Webb development borders portions of the Plan Area.

### **Neighborhoods A and B (Phase I)**

A PSA for the Diamond Creek property (Neighborhood A), which for purposes of this discussion includes the Eskaton parcel, was performed in 1988 by Harding Lawson Associates.<sup>1</sup> The study consisted of a site visit, aerial photograph review, and discussions with Roseville Fire Department and Central Valley Regional Water Quality Control Board staff. The property consists of 360 acres of largely undeveloped land that has remained essentially unchanged. The investigation revealed no visible evidence of improper disposal or storage of hazardous waste on the site.

Two small concrete structures located just south of Pleasant Grove Creek near the eastern boundary of the Diamond Creek property house a wastewater lift station and a 4,000-gallon above-ground tank for chlorine. The chlorine, which is used to disinfect wastewater, was not in use in 1993. There is also an operational 1,000-gallon above-ground diesel fuel tank at the site.<sup>2</sup> A PSA for the Mourier 140 property (Neighborhood B) was performed by Raney Geotechnical in 1993.<sup>3</sup> The study included a review of federal and State databases and files that contain information on known or potentially contaminated sites, a site visit, aerial photograph review, and discussions with City of Roseville personnel. Although the property is undeveloped and was used



- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- • • Proposed 60 Kv Power Lines
- Existing Electrical Lines

SOURCE: Wade Associates, North Roseville Specific Plan Draft, November 10, 1994;  
EIP Associates, May 1997.

**Figure 4.8-1**

### Known Hazardous Materials Or Public Safety Areas of Interest

0 1/4 1/2  
Scale In Miles



96063  
Base







primarily for dry farming, surface soil samples were collected and analyzed to evaluate whether two upgradient industrial sites within the watershed and possible historic on-site pesticide usage had contaminated the property. No contamination was found. Results of the PSA indicated that there was no evidence of hazardous materials or contamination that would pose a risk to the public or the environment.

In early 1988, Kleinfelder conducted a follow-up assessment to a PSA they prepared in 1987 for the Woodcreek North property. The assessment included additional file review and limited water and soil sampling to assess potential impacts associated with historic pesticide and insecticide use. This area, like the adjoining Mourier 140 property, is undeveloped. It is bordered on the northeast by the South Branch of Pleasant Grove Creek. A relatively new underground diesel storage tank is present near the western boundary of the property to store diesel fuel for a City of Roseville Water/Sewer Division emergency generator. The second assessment did not find any adverse impacts that would increase the potential risks to the public or the environment.<sup>4</sup> However, the PSA did note the American Olean Tile Company site, which is located approximately one-and-a-half miles east of the Plan Area residential development, was included in the Department of Toxic Substances Control's Abandoned Site Program Information System List because of surface impoundments at the site. The ponds have not been remediated to date, and the Department of Toxic Substances Control has taken no further action.<sup>5</sup>

### **Neighborhoods C and D (Phase II)**

A PSA for the Woodcreek West property (Neighborhood D) was performed by Kleinfelder at the same time as the Woodcreek North property. The PSA did not identify any above-ground or underground structures or other uses that would suggest potential hazardous materials impacts.

The Walaire 160 property (Neighborhood C) has traditionally been used for dry farming and grazing. A PSA performed by Raney Geotechnical in 1993 included a review of federal and State databases and files that contain information on known or potentially contaminated sites, a site visit, aerial photograph review, and discussions with Roseville Fire Department personnel.<sup>6</sup> The consultant concluded there were "no imminent threats to the environmental integrity of the property."

### **Del Webb Specific Plan Area**

The northern boundary of the Woodcreek West property and western boundary of the Woodcreek North property and the Walaire 160 property are adjacent to the Del Webb Specific Plan Area. In 1993, Dames & Moore prepared a study in conjunction with the *Del Webb Specific Plan Environmental Impact Report (EIR)*. The purpose of the study was to update existing information, assess project-related potential hazardous materials impacts, and to propose mitigation measures for significant impacts. Their assessment consisted of a review of previous PSA reports prepared by Anderson Geotechnical Consultants in 1988 and 1992, a site reconnaissance, and an aerial photograph review. Results of the Anderson Geotechnical assessments and Dames & Moore's study indicated the presence of potential sources of contamination that had not yet been investigated or remediated. These included scattered petroleum product containers and other automotive parts or equipment, septic systems, and wells.



The *Del Webb Specific Plan Draft EIR* contained specific mitigation measures to address these concerns. These materials were removed as part of the Del Webb Specific Plan development.

### **Other Facilities in the Vicinity of the NRSP Area**

Several facilities outside the Plan Area involve operations in which hazardous materials are used or could be present. There is little likelihood that a release from these facilities would affect development in the Plan Area because of the regulations and policies with which they are expected to comply. Nonetheless, such facilities are important in the context of evaluating cumulative impacts associated with Plan Area development.

Existing manufacturing facilities such as Hewlett-Packard, which is adjacent to proposed Neighborhood B (Mourier 140 and Woodcreek North properties), and NEC Electronics Inc., approximately three-quarters-mile east of Neighborhood B, must comply with State and local laws governing hazardous materials use, storage, inventory and reporting, transportation, and disposal. NEC is one of the larger facilities in this area. According to Roseville Fire Department records, NEC uses and stores small quantities of a number of hazardous materials and is listed as a large-quantity generator on the RCRA list. Acutely hazardous materials at the facility are kept in environmentally controlled rooms with continuous monitoring.<sup>7</sup> The Roseville Fire Department regularly inspects these and other facilities using hazardous materials to ensure compliance with applicable hazardous materials regulations.

### **Sunset Industrial Area**

The Sunset Industrial Area, consisting of approximately 8.3 square miles in unincorporated Placer County, is located immediately north and west of the Plan Area. The area immediately north of the Diamond Creek property has been designated Industrial Reserve. Approximately seven percent of the total land has been developed.<sup>8</sup> According to the Placer County General Plan, typical uses allowed under the Industrial land use designation include light industrial, heavy industrial (involved in the manufacturing of large items and/or using large manufacturing equipment), and warehousing.<sup>9</sup> Hazardous materials used in manufacturing facilities in the Sunset Industrial Area are monitored by the Placer County Department of Health & Human Services, Division of Environmental Health.<sup>10</sup> Also located within the boundaries of the Sunset Industrial Area are a septage disposal site, regional landfill, and electrical peaking facility.

The Placer County Department of Public Works currently operates a facility for the disposal of septage from septic tank pumpings and chemical toilet waste. Prior to accepting domestic septage, the facility accepted industrial wastewater. The facility is located outside the Roseville City limits, approximately one mile east of the Plan Area boundary. Septage is discharged to surface impoundments, dried, and later transported to a solid waste disposal site. The industrial wastewater ponds were closed in 1986 and various attempts were made to improve the facility so that operations could continue. The County has recently implemented a groundwater monitoring program in accordance with the provisions of Article 5, Chapter 15 of Title 23 of the California Code of Regulations to ensure that sludge constituents are not contaminating groundwater quality. However, the facility is expected to stop accepting septage after September

1996, and to be decommissioned no later than October 1, 1997.<sup>11</sup> Potential hazards associated with this facility would be primarily odor related, as discussed in Section 4.10, Air Quality, or water-quality related, as discussed in Section 4.4, Hydrology and Water Quality.

The southern boundary of the Western Regional Sanitary Landfill property is located approximately one mile northwest of the Plan Area, at the intersection of Athens and Fiddymont Roads (northwest of the Walaire 160 Property). The 320-acre facility is a permitted Class III landfill that receives wastes from Lincoln, Rocklin, Roseville, Loomis, Auburn, and the unincorporated portion of Placer County Franchise Areas 1, 5 and 6. In addition to typical household-type solid wastes, the facility also accepts septage, incinerator ash, and nonfriable asbestos-containing materials. Hazardous or medical wastes are not accepted at the landfill. Landfill operations and water quality protection are subject to the requirements specified in Title 14 and Title 23 of the California Code of Regulations, respectively.

The Northern California Power Agency (NCPA) operates a peaking facility one-quarter mile west of the end of Sunset Boulevard, northeast of Neighborhood A (Diamond Creek property) and outside the City limits. The 25,800-kilowatt combustion-turbine facility is part of an expanded peaker system that reduces the need for outside power purchases, resulting in lower electrical costs to NCPA customers. The facility uses natural gas during normal operation, but there is a 100,000-gallon storage tank that contains fuel oil in case the natural-gas supply is interrupted. The natural-gas power system contains built-in controls for shutdown if monitored systems deviate from established normal operating conditions. The fuel-oil storage tank is bermed to contain accidental spillage, and the fuel pipeline is equipped with a secondary containment feature to control leakage.<sup>12</sup>

#### Proposed Wastewater Treatment Plant

A regional wastewater treatment plant has been proposed west of the Plan Area. Plant location and design is still being evaluated at this time. A Draft Environmental Impact Report was prepared in May 1996. Wastewater treatment plants typically use large amounts of chlorine gas to disinfect the wastewater and sulfur dioxide gas to remove residual chlorine before the treated effluent is discharged to surface water. Chlorine and sulfur dioxide are considered "acutely hazardous materials." However, because wastewater treatment plants must comply with strict regulations governing the use and storage of acutely hazardous materials, which includes the preparation of plans to minimize risks to the public from an inadvertent release of these materials, potential risks to residential development in the Plan Area would be minimal. The NRSP in and of itself does not propose any development near the wastewater treatment plant or land uses within the physical boundary of the wastewater treatment plant site. As with other facilities using hazardous materials, the use of wastewater-treatment chemicals at the plant would be strictly regulated. Assuming compliance with applicable regulations, further analysis of potential exposure of site occupants or visitors to hazardous materials, if any, that could be released from the proposed wastewater treatment plant is not required.



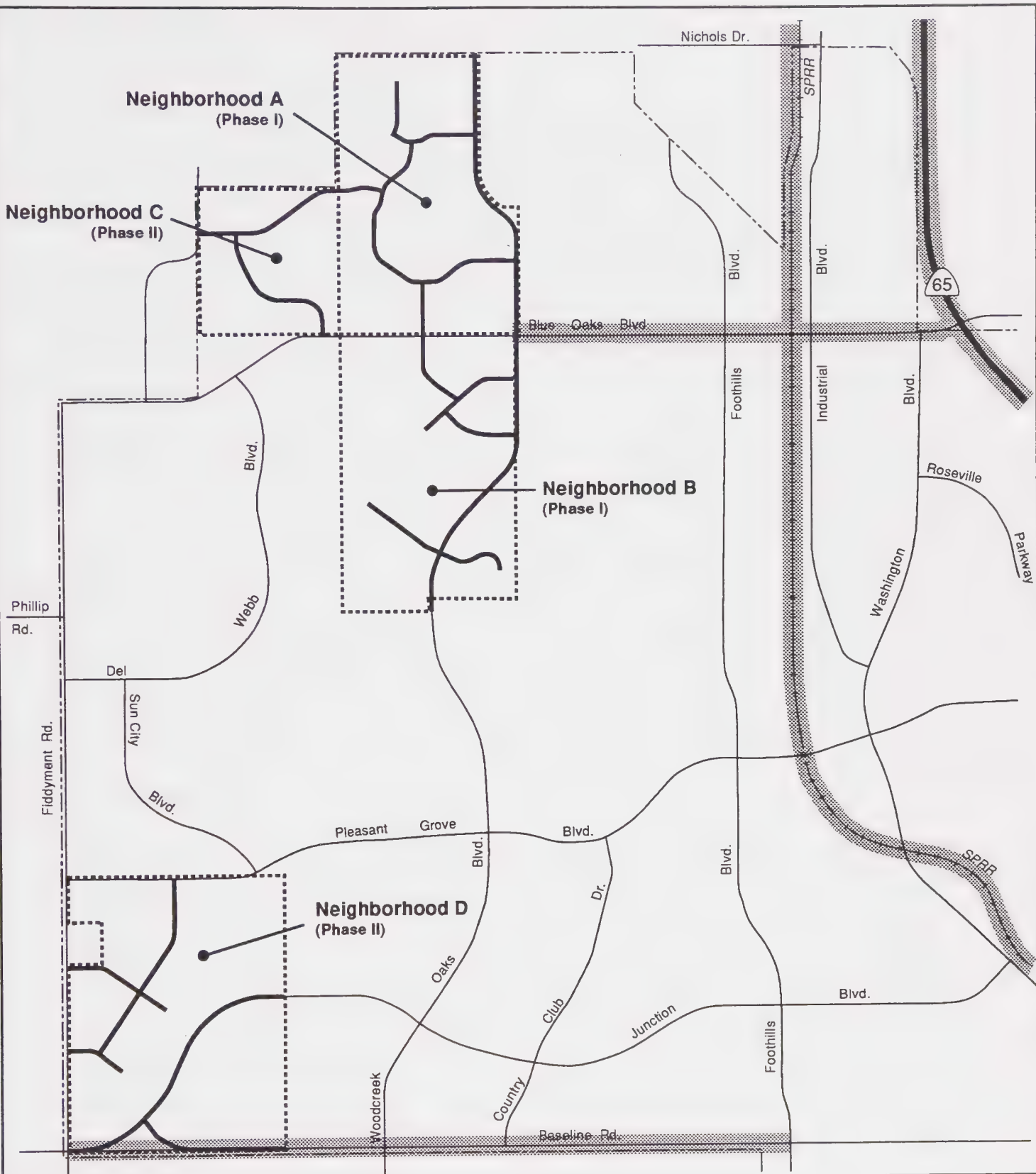
### **Transportation of Hazardous Materials Within and Adjacent to the NRSP Area**

Hazardous materials are routinely transported by truck or rail. With few exceptions, Section 31303 of the California Vehicle Code and U.S. Department of Transportation (DOT) regulations prohibit the transportation of hazardous materials through residential neighborhoods and require that hazardous materials be transported via routes with the least overall travel time. As shown in Figure 4.8-2, the City of Roseville Police Department Traffic Division has designated truck routes upon which hazardous materials may be transported by common carrier through the City to light-industrial facilities (e.g., Hewlett-Packard). Currently, hazardous materials can be transported only on Blue Oaks Boulevard west from State Route 65 and from Foothills Boulevard west on Baseline Road, adjacent to the Woodcreek West property.<sup>13</sup> Hazardous materials may also be transported on State Route 65 or the Southern Pacific Railroad line, approximately two miles to the east of the northern Plan Area boundary. Transportation of hazardous materials along any City or State roadways or rail lines is subject to all DOT hazardous materials transportation regulations.

### **City of Roseville Hazardous Materials Emergency Response**

The Roseville Fire Department has developed a Hazardous Materials Emergency Response Plan. The plan describes organizational and operational responsibilities in the event of a hazardous materials emergency, including cleanup and decontamination procedures. As first responders to hazardous material incidents, personnel on each shift are trained to respond to hazardous materials incidents according to standards specified in CCR Title 8, § 5192 (Hazardous Waste Operations and Emergency Response). Through mutual aid agreements, the Roseville Fire Department can also request services from the Placer County Hazardous Materials Response Team in the event of a large-scale incident.<sup>14</sup> The Roseville Fire Department would also provide assistance to the California Highway Patrol, Office of Emergency Services, and other responding agencies as requested in the event of a hazardous materials spill on State Route 65 or Interstate 80.

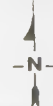
The City is developing an Emergency Response Plan (Disaster Plan).<sup>15</sup> The plan will be an extension of the City's Multi-Hazard Functional Plan and will follow nationally adopted Incident Command System guidelines. The Emergency Response Plan will describe roles and responsibilities during emergencies, operating procedures, equipment, and administrative procedures.<sup>16</sup> Specific evacuation routes are generally not included in disaster plans since emergency response procedures and evacuation would need to be determined on a case-by-case basis. Although existing City emergency plans do not indicate specific routes, they have determined that if evacuation in response to a hazardous materials incident in existing or planned areas was needed that evacuees would be directed to areas upwind of the incident. The predominant wind direction is from the south or southwest. Depending on weather conditions, evacuation to the east or west would be the second option. Evacuation to the north would occur only if weather conditions necessitated it. The exact routes and distances would be determined in response to the nature and severity of the incident.<sup>17</sup>



**Figure 4.8-2**

**Authorized Hazardous Materials Transportation Routes**

0 1/4 1/2  
Scale In Miles



96063  
Base



SOURCE: Wade Associates, North Roseville Specific Plan Draft, November 10, 1994;  
EIP Associates, May 1997.





### **Hazardous Waste Management Plan**

A Hazardous Waste Management Plan (HWMP) was developed in 1988 and adopted in 1989 by Placer County in response to the Tanner Act (AB 2948). In accordance with Tanner Act requirements, the HWMP includes information on current and projected hazardous waste generation in the County, including household hazardous waste, an inventory of contaminated sites and hazardous waste treatment, storage, and disposal (TSD) facilities, and administrative policies and implementation measures. Placer County's plan has not yet been approved by the State because of disagreements over the County's "fair share" policy concerning siting of TSD facilities. The County does not intend to revise and resubmit its plan; however, the plan is updated as needed.<sup>18</sup> The City of Roseville has not taken action on this plan, and no specific General Plan policies have been adopted to address this issue.<sup>19</sup>

No designated hazardous waste TSD facilities exist in Placer County. Siting of a hazardous waste TSD within Placer County, including the Plan Area, is highly unlikely since the County has determined a TSD would only be considered for location in areas designated for industrial uses. (The Industrial land use designation is not included in the Plan Area, but would be allowable immediately north of the Plan Area.) Placer County has determined the amount of waste generated does not justify the need for a TSD within the county. As such, hazardous wastes generated as a result of the North Roseville Specific Plan development would require disposal at TSD facilities outside the county until demand for these facilities exceeds their capacity or until on-site treatment of hazardous wastes becomes more cost effective than off-site disposal.<sup>20</sup> Placer County General Plan Hazardous Materials Policy 8.G.9 requires that applications for discretionary development that will generate hazardous wastes or use hazardous materials must include detailed information on hazardous waste reduction, recycling, and storage.

### **High-Voltage Electric Power Lines**

A 230-kilovolt (kV) electrical receiving station is planned adjacent to Neighborhood D (Woodcreek West property), on the east side of Fiddymment Road, approximately 375 feet south of Pleasant Grove Boulevard (See Figure 4.8-1).

The northern boundary of the 10.2-acre substation site is immediately adjacent to an existing 425-foot-wide transmission corridor that consists of three above-ground 230-kV transmission lines that run east-west through the Woodcreek West property, approximately 375 feet south of Pleasant Grove Boulevard. Maximum site buildout could include three additional outgoing 230-kV transmission lines and one additional 230-kV power transformer. A 50-foot setback from the property line is proposed along the east side of the station, and the station includes a 50-foot landscape buffer along its southern property line. A 35-foot buffer is proposed along Fiddymment Road to the west and a concrete masonry wall is proposed along the south and east sides of the station.

A 100-foot-wide corridor in the Woodcreek West property contains a 12-kV line that runs north to south approximately 700 feet west of the eastern boundary. A 50-foot setback will be provided between the edge of the powerline corridor and all single-family residences.

Materials used at the Fiddymont receiving station would include mineral oil and batteries. Mineral oil would be contained within one transformer. Sixty-three cells of sealed, maintenance-free gel-type batteries would be located in a fire-proof control center that provides secure containment for the unit. Secondary containment would consist of a subfloor container capable of holding 100 percent of the total acid content of the batteries. Secondary containment for the mineral oil would be provided by a pit surrounding the transformer. This structure can hold 100 percent of the transformer's oil capacity and the maximum rainfall over a 24-hour period for the greater of the area's 25-year history, as required by the Uniform Fire Code, or the total maximum rainfall over a 1-month period, as required by the U.S. EPA.<sup>21</sup>

Recently, the potential health effects of electric and magnetic fields (EMF) associated with transmission lines, such as those that traverse Woodcreek West, have been the focus of scientific controversy. As a result, utility companies and public health agencies are trying to address public concern over the potential health effects of exposure to EMFs. Experts are uncertain there is a danger, and if so, what constitutes a safe level of exposure. The following discussion is a general summary of existing information related to the hazards associated with EMF exposure.

### **Electric and Magnetic Field Strength**

Electric and magnetic fields are created by electric charges. Electric fields are created by the forces that electric charges exert upon one another, while magnetic fields result from the additional forces that the moving charges exert upon other moving charges.<sup>22</sup> Therefore, magnetic fields are a by-product of electric fields. Current describes the rate of flow of electricity through a line. When electric current is flowing through a line, the current sets up a magnetic field around itself. Therefore, when there is a flow of electricity in utility transmission lines, distribution lines, and typical home appliances, both electric and magnetic fields are created.<sup>23</sup>

The electric field intensity (strength) is expressed in kilovolts per meter (kV/m), which describes how the voltage changes with distance from the conductor. Near a transmission line, the electric field intensity depends on the voltage applied to the line, the distance from the line, as well as other factors.<sup>24</sup> Electric field intensity decreases rapidly with increasing distance from a transmission line. In addition, electric fields are effectively shielded by larger objects such as trees and houses.

Magnetic field strength is reported in milligauss (mg) measured one meter above the ground surface. Compared to electric fields, magnetic fields do not decrease as rapidly as distance from the source increases, and they are generally unaffected by large objects.<sup>25</sup>

### **Potential Health Hazards**

Since the early 1970s, the public has become increasingly aware of potential health hazards associated with long-term exposure to EMF generated by electrical transmission lines. Although some preliminary studies have raised the possibility of hormonal and nerve system changes in living things exposed to EMFs, whether these changes pose potential health risks to humans is unclear. Suspected health risks include the promotion of cancer, birth defects, other reproductive



and developmental abnormalities, and various neurological effects, such as chronic depression. Some studies have found a statistical correlation between EMFs and health effects, while others have not. Furthermore, correlation is not necessarily causation, and no causal relationship between EMFs and health effects has been established.<sup>26</sup>

In California, research to evaluate potential health effects was funded under SB 2519, Chapter 1551, Statutes of 1988. Under this bill, the California Public Utilities Commission (CPUC) and the State Department of Health Services (DHS) were to conduct a study of any risks that could be related to exposure to electric and magnetic fields produced by electric utilities facilities. The first phase of the study consisted of a review of the existing literature. As of March 1992, a report to the legislature recommended no regulation of electric and magnetic fields. A second report, dated September 15, 1989, recommended additional research to identify health effects and a statewide exposure assessment program. The California Energy Commission (CEC) published a staff report summarizing health effects studies from high-voltage transmission lines in July 1992. Based on the CEC's evaluation of these studies, the research results remain inconclusive. In 1993 the Public Utilities Commission (PUC) issued its EMF policy. The PUC also concluded that studies did not show a relationship between EMFs and health effects. The CEC has not established regulatory limits on the allowable strength of electric and magnetic fields from high-voltage transmission lines. Instead, they require utilities to adopt no- and low-cost measures to avoid increasing EMF exposure when economically feasible.<sup>27</sup>

### 4.8.3 REGULATORY SETTING

The following discussion summarizes federal, State, and local regulatory authorities pertaining to hazardous materials management and cleanup. Additional discussion about specific laws and regulations is contained in Appendix E, *Regulatory Compliance Overview for the Management of Hazardous Materials*.

#### **Federal**

Many federal agencies regulate hazardous materials. These include the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Nuclear Regulatory Commission (NRC), and the Department of Transportation (DOT). Applicable federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR).

#### **State**

The California Environmental Protection Agency (Cal/EPA) and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in the state. The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Chemical suppliers are responsible for complying with all applicable packaging, labeling and shipping regulations.

Within Cal/EPA, the Department of Toxic Substance Control (DTSC), formerly a division within the Department of Health Services (DHS), has primary regulatory responsibility. Enforcement

of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport and disposal of hazardous materials under the authority of the Hazardous Waste Control Law (HWCL).

State regulations applicable to hazardous materials are contained primarily in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials management. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) regulate surface and groundwater quality according to the provisions of the Porter-Cologne Water Quality Act, the Toxic Pits Cleanup Act, Underground Tank Law, and Clean Water Act.

### **Local**

Placer County and the City of Roseville are responsible for enforcing many State regulations governing hazardous materials management, including waste generation, minimization, and storage, and underground storage tanks.

### **County**

In addition to ensuring implementation of the Hazardous Waste Management Plan described above, the Placer County Department of Health and Medical Services, Environmental Health Division (PCDEH), regulates the use, storage, and disposal of hazardous materials in Placer County by issuing permits, monitoring regulatory compliance, performing inspections, investigating complaints, and other enforcement activities. PCDEH also reviews technical aspects of hazardous waste site cleanups, and mitigation of certain contaminated sites resulting from leaking underground storage tanks (USTs).

Other County offices also perform hazardous material management activities. The Placer County Office of Emergency Services (PCOES) maintains an inventory of hazardous materials in the county and provides emergency planning and response services in conjunction with the City of Roseville Fire Department. Application of pesticides is regulated, monitored, and enforced by the Placer County Agricultural Commissioner. Air quality is regulated, monitored, and enforced by the Placer County Air Pollution Control District (PCAPCD).

The Placer County General Plan Hazardous Materials Policy 8.G.8 requires that a buffer zone be provided between facilities that store and process hazardous materials and property boundaries.

### **City**

The City of Roseville Fire Department is responsible for enforcing UST regulations, which include issuing permits for tank use and removal and annual inspections. The Fire Department also oversees cleanup of soil contamination related to leaking USTs in cooperation with the County and the RWQCB. As described above, the Roseville Fire Department also inspects and monitors facilities required to comply with federal and State hazardous materials inventory and reporting regulations and provides emergency response in the event of an incident involving hazardous materials.



The City of Roseville's Environmental Utilities Department is responsible for ensuring compliance with the Source Reduction and Recovery Element (SRRE) provisions of the Integrated Waste Management Act (AB 939), which includes guidelines for the management of household hazardous waste.

The City of Roseville does not have a specific policy that addresses minimum setback requirements for land uses that could involve the use of hazardous materials, although existing City setback requirements would provide some level of protection from accidental releases.

#### **4.8.4 IMPACTS**

As stated earlier, the impacts of the Proposed Project are measured against existing conditions, which are primarily undeveloped grasslands, creeks and riparian areas. It should be noted that two of the properties in Phase I, Diamond Creek and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impact analysis does not assume development of these light industrial designations, it can be considered a "worst-case" analysis. That is, if the Proposed Project were compared to developing the Plan Area under existing entitlements, the impacts would be less severe than those identified below.

##### **Method of Analysis**

For purposes of this analysis, the typical use of hazardous materials and their effects were qualitatively assessed through review and evaluation of available documents that identified potential contaminants and hazardous materials users within the Plan Area and its vicinity. Information regarding hazardous materials use, emergency planning, and transportation was obtained from agency files and discussions with State and local agency staff. City of Roseville planning documents were reviewed to qualitatively assess the potential for hazardous materials use and accidents in future development and at industrial uses adjacent to the Plan Area. Published information regarding the potential hazards generated by EMFs and related City of Roseville "prudent action" policy were also reviewed.

The potential for airborne releases of hazardous materials or odors from adjacent industrial facilities are discussed in Section 4.10, Air Quality.

In determining the level of significance, the analysis assumes that the Proposed Project would comply with relevant City General Plan policies, ordinances and Improvement Standards. Therefore, such policies, ordinances and standards are not identified as mitigation measures.

##### **Standards of Significance**

For the purpose of this EIR, an impact is considered significant if the Proposed Project would result in:

- The development of contaminated lands resulting in potential exposure of people to contaminated soil or groundwater;



- The use, production, storage, transportation, or disposal of materials in a manner that would exceed health standards, and thus pose an unacceptable health hazard to people;
- Interference with emergency response plans or emergency evacuation plans; or
- Exposure of people to potential known hazards associated with high-voltage transmission lines.

## PHASE I IMPACTS

### IMPACT 4.8-1(A):

**Increased potential for accidental release or spill of hazardous materials.**

### SIGNIFICANCE:

Less than significant

### MITIGATION MEASURE:

None required

Exposure of construction workers or site occupants to hazardous materials could occur in the following manner:

- improper handling or use of hazardous materials or hazardous wastes during construction or operation of the project, particularly by untrained personnel;
- transportation accident;
- environmentally unsound disposal methods; or
- fire, explosion or other emergencies.

Hazardous materials would be used in varying amounts during construction and operation of the Proposed Project. Construction workers and future site residents could be exposed to hazards associated with accidental releases of hazardous materials, which could result in adverse health effects. The types and amounts of hazardous materials would vary according to the nature of the activity; therefore, the specific hazardous materials and amounts that would be on site or transported cannot be determined at this time. In some cases, it is the *type* of hazardous material that is potentially hazardous; in others, it is the *amount* of hazardous material that could present a hazard. However, due to the nature of the Proposed Project, the types and quantities of hazardous materials that could be present during occupancy of the Plan Area are expected to be minimal and would be limited. Planned development activities and the types of hazardous materials that could be present at the Plan Area are described below. A summary of common groups of hazardous materials that could be used in these facilities and potential associated hazards are shown in Table F-1 in Appendix F.

The General Plan contains the following policies intended to ensure that facilities comply with applicable hazardous materials regulations and commits the City to maintaining compatibility between facilities that use hazardous materials and surrounding land uses to ensure public safety.

- SE-1. Require the disclosure of the use and storage of hazardous materials in existing and proposed industrial and commercial activities, and siting of hazardous waste disposal facilities, in accordance with Placer County guidelines and State law.
- SE-5. Pursue the implementation of a permit program for hazardous materials users that are required to submit "long form" Hazardous Material Management Plan, pursuant to State law.

The hazardous materials disclosure provisions of General Plan Policy SE-1 are intended to ensure that preventative steps are taken to minimize the occurrence of hazardous materials incidents and to establish response procedures should such incidents occur. For example, new light-industrial and some commercial businesses would be required to submit lists of hazardous materials in their facilities, prepare plans for managing these materials pursuant to applicable laws and regulations, and prepare plans for mitigating releases. This information would enable the Roseville and Placer County Fire Departments to provide an adequate response. The permit fee component of Policy SE-5 would allow the Roseville Fire Department to recover costs associated with administering this program.

Phase I includes some residential development adjacent to planned commercial and industrial land uses. Residents could be exposed to accidental releases at adjacent commercial or light industrial facilities. According to Roseville Fire Department personnel and a review of available information, hazardous-materials-related incidents, such as an inadvertent release of material, have been minimal in existing facilities. Where there was a release, facility operators corrected the situation to minimize the potential for a repeat occurrence. It is probable that new facilities would have similar, minor problems with inadvertent releases.<sup>28</sup> Assuming all existing and new facilities adjacent to Phase I development would be in compliance with applicable laws and regulations, and that the Roseville Fire Department would continue to perform inspections and enforce hazardous materials use and storage requirements, the likelihood of a release from new facilities that could result in adverse health effects would be minimal.

### **Hazardous Materials Transportation in the Plan Area**

Hazardous materials would be delivered to the Plan Area for various purposes, as described above. Because federal and State regulations allow such activities, and existing roads within and adjacent to the Plan Area are not approved for through transportation, this is considered a less-than-significant impact.

### **Hazardous Materials Emergency Response**

Although small, the increase in the amount of hazardous materials within the Plan Area could require additional emergency response capabilities compared to existing conditions. According to the Roseville General Plan, Section VIII (Safety Element), targeted response times have not been met consistently, and there is a need for additional fire service. As described in Section 4.12, Public Services and Utilities, a permanent fire station would be constructed in the southeast

corner of the Mourier 140 property in Neighborhood B or in the industrial area east of the Diamond Creek property. The RFD has not determined the exact location of this new permanent fire station. Regardless of where the station is located permanently, adequate fire protection services would be provided to Phase I.

The Roseville Fire Department hazardous materials response protocols, operational and administrative procedures contained in the Emergency Plan would be important in safely managing a hazardous materials incident involving the Plan Area.

Implementation of existing General Plan policies and compliance with applicable federal and State laws and regulations and Fire Department Guidelines would reduce impacts associated with the use, storage, and transportation of hazardous materials in the Plan Area to a less-than-significant level.

|                            |                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------|
| <b>IMPACT 4.8-2(A):</b>    | <b>Increased risk of contamination from improper disposal of household hazardous wastes.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                        |
| <b>MITIGATION MEASURE:</b> | None required                                                                                |

Development of Phase I residential uses would result in expanded use of household hazardous materials. A resulting increase in hazardous waste disposal in residential trash pick-ups, dumpsters, transfer stations, and landfills would likely occur. The disposal of household hazardous wastes into facilities not designed for such materials can cause fires, explosions, and groundwater or soil contamination, resulting in a risk to the public.

The General Plan contains the following policy intended to promote the proper disposal of household hazardous wastes through continued implementation of periodic drop-off programs for unwanted hazardous materials.

- SE-2. Work with Placer County and other public agencies to inform consumers about household use and disposal of hazardous materials.

Current programs being used by the City include a drop-off program for used motor oil and a biannual household hazardous waste drop-off day. The City is also developing a permanent drop-off location in conjunction with a regional Materials Recovery Facility (MRF), which would allow for the removal of hazardous materials in delivered refuse prior to disposal in the landfill. The MRF became operational in November 1995.<sup>29</sup>

Implementation of programs such as the regional MRF, which was identified in the City's Integrated Waste Management Plan, would minimize impacts associated with risk of exposure due to improper disposal of household hazardous wastes to less-than-significant levels.



|                               |                                                                                              |
|-------------------------------|----------------------------------------------------------------------------------------------|
| <b>IMPACT 4.8-3(A):</b>       | <b>Existing or unknown hazards related to past uses within or adjacent to the Plan Area.</b> |
| <b>SIGNIFICANCE:</b>          | Potentially significant                                                                      |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.8-1 (Remediate site hazards, if discovered)                             |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                        |

Preliminary site assessments have been performed for properties within the Phase I Plan Area. Based on the information presented in the assessment reports, there are only a few locations that could pose hazards-related problems. The PSAs recommended actions to remediate identified hazards prior to site development.

Although it is assumed that known sites will be remediated prior to development, it is possible that not all septic tanks, wells, or other underground storage devices or conveyance systems have been identified, because these could have been installed prior to permitting requirements, or additional information could have become available in agency files or databases since 1993, when the last preliminary site assessment was performed.

On the other hand, above-ground liquid or gas storage containers (e.g., the chlorine tank noted in the Diamond Creek property) and liquid conveyance systems (e.g., sewer lines) are known to exist. An area in the northeast corner of the Del Webb Specific Plan, for which mitigation measures for further investigation and remediation have been adopted, lies immediately southwest Neighborhood B (Woodcreek North/Mourier 140 properties). The mitigation measures include removal of existing containers and debris, further review of agency information, and sampling and analysis of soils for possible contamination.<sup>30</sup>

Implementation of Mitigation Measure 4.8-1, which requires remediation of contaminated sites in the Plan Area, if any are discovered, would reduce this impact to a less-than-significant level.

|                             |                                                            |
|-----------------------------|------------------------------------------------------------|
| <b>IMPACT 4.8-4(A):</b>     | <b>Potential effects of electromagnetic fields (EMFs).</b> |
| <b>SIGNIFICANCE:</b>        | Less than significant                                      |
| <b>MITIGATION MEASURES:</b> | None required                                              |

A 60-kV electrical substation is planned for a one acre site in Neighborhood A (Diamond Creek). In addition, transmission lines are proposed along Woodcreek Oaks Boulevard near Pleasant Grove Creek in Neighborhood A (Diamond Creek property). As discussed above, a relationship between EMF exposure and health effects has not been scientifically proven. While there are not enough data to determine potential effects of EMFs, the City has implemented General Plan Policies SG-1 and SG-2 that limit the potential impacts from EMFs.

- SG-1. Ensure implementation of the Electric Department's policy of "prudent action" with respect to EMF issues.
- SG-2. Limit public use within electrical power line easements to parking and low-density recreational activities such as undeveloped nature areas, bike or jogging paths.

In the absence of more conclusive information, and with implementation of existing City policies, the impact of the Proposed Project with respect to EMFs would be less than significant.

|                               |                                                                                                                                                                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.8-5(A):</b>       | <b>Increased fire potential.</b>                                                                                                                                                                                                                                                                              |
| <b>SIGNIFICANCE:</b>          | Potentially significant                                                                                                                                                                                                                                                                                       |
| <b>MITIGATION MEASURES:</b>   | Mitigation Measure 4.8-2(a) (Clear areas slated for construction activities of materials that could serve as fire fuel prior to initiating these activities),<br>Mitigation Measure 4.8-2(b) (Require spark-generating construction equipment to be equipped with manufacturer's recommended spark arresters) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                                                                                                                                                                                                         |

Grading and construction activities introduce equipment that could create sparks which can ignite dry grass until existing vegetation has been cleared from the Proposed Project site. During construction, the use of power tools and acetylene torches can also increase the risk of fire hazard; however, this risk would be similar to other construction sites and is considered potentially significant. With implementation of Mitigation Measures 4.8-2(a) and (b) the potential for construction related fires would be minimized to a level that is less than significant.

Following construction activities, the potential for fire would be similar to mixed-use developments in surrounding areas, and is considered less than significant.

## **FULL PROJECT IMPACTS**

The following section discusses impacts associated with development of the Full Project. All Phase I development impacts apply to the Full Project development scenario, and the reader is referred to that impact discussion as appropriate.

|                            |                                                                                    |
|----------------------------|------------------------------------------------------------------------------------|
| <b>IMPACT 4.8-1(B):</b>    | <b>Increased potential for accidental release or spill of hazardous materials.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                              |
| <b>MITIGATION MEASURE:</b> | None required                                                                      |

Potential impacts related to the use, storage, and transportation of hazardous materials in the Full Project would be similar to those associated with Phase I. The reader is referred to the discussion of Impact 4.8-1(A). Potential impacts could be slightly increased in magnitude since more property would be developed, which could result in an increase in the amount of hazardous materials. However, as with Phase I, quantities would be small; therefore, the potential for accidental releases that could adversely affect human health would be minimal. Implementation of General Plan policies and other city measures identified for Phase I would be the same for both development scenarios. Emergency response would be provided by fire stations planned for Phase I and Phase II (in the northwest corner of Woodcreek West). Therefore, Full Project impacts would be less-than-significant.



|                            |                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------|
| <b>IMPACT 4.8-2(B):</b>    | <b>Increased risk of contamination from improper disposal of household hazardous wastes.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                        |
| <b>MITIGATION MEASURE:</b> | None required                                                                                |

The Full Project proposes to develop 5,098 residential units as compared to 2,523 units under Phase I. The amount of household hazardous waste would be greater because more residential units would be developed; however, quantities would not be considered significant. Potential impacts related to household hazardous waste in the Plan Area would be similar to those associated with the Phase I scenario. The reader is referred to the discussion of Impact 4.8-2(A).

|                               |                                                                                              |
|-------------------------------|----------------------------------------------------------------------------------------------|
| <b>IMPACT 4.8-3(B):</b>       | <b>Existing or unknown hazards related to past uses within or adjacent to the Plan Area.</b> |
| <b>SIGNIFICANCE:</b>          | Potentially significant                                                                      |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.8-1 (Remediate site hazards if discovered)                              |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                        |

As noted in the Setting, PSAs for Neighborhood D (Woodcreek West property) and Neighborhood C (Walaire 160 property) did not identify any hazards associated with past uses of the properties, and the potential for contamination identified at limited locations in the Phase I area would be addressed through actions presented in the PSAs. However, unknown hazards could exist in the Plan Area. The reader is referred to the discussion of Impact 4.8-3(A) regarding the significance of such findings.

Implementation of General Plan policies and mitigation identified for Phase I would be the same for both development scenarios, and would reduce this impact to a less-than-significant level.

|                             |                                                            |
|-----------------------------|------------------------------------------------------------|
| <b>IMPACT 4.8-4(B):</b>     | <b>Potential effects of electromagnetic fields (EMFs).</b> |
| <b>SIGNIFICANCE:</b>        | Less than significant                                      |
| <b>MITIGATION MEASURES:</b> | None required                                              |

In addition to a 60-kV substation and transmission lines that would be located in Neighborhood A (Diamond Creek property), near the intersection of Woodcreek Oaks Boulevard and Pleasant Grove Creek, a 230-kV electrical receiving station is planned on the east side of Fiddymment Road, approximately 375 feet south of Pleasant Grove Boulevard in Neighborhood D (Woodcreek West). The northern boundary of the 10.2-acre substation site is immediately adjacent to an existing 425-foot-wide transmission corridor that consists of three above-ground 230-kV transmission lines that run east-west through Neighborhood D (Woodcreek West property) approximately 375 feet south of Pleasant Grove Boulevard. Maximum site buildout could include three additional outgoing 230-kV transmission lines, a 60 kv line, and one additional 230-kV power transformer. A 50-foot setback from the property line is proposed along the east and south side of the station. A 35-foot buffer is proposed along Fiddymment Road to the west. In addition



a concrete masonry well is proposed along the south and east sides of the station. A 100-foot-wide corridor in Neighborhood D (Woodcreek west) contains a 12-kV line that runs north to south approximately 700 feet west of the eastern boundary.

As with Phase I, development of the Full Project could expose people living, working, or visiting the area to potential hazards associated with EMFs generated by the high-voltage transmission lines. As discussed above, a relationship between EMF exposure and health effects has not been scientifically proven, and this is considered a less-than-significant impact. The reader is referred to the discussion of Impact 4.8-4(A).

**IMPACT 4.8-5(B):**

**SIGNIFICANCE:**

**MITIGATION MEASURES:**

**Increased fire potential**

Potentially significant

Mitigation Measure 4.8-2(a) (Clear areas slated for construction activities of materials that could serve as fire fuel prior to initiating these activities),

Mitigation Measure 4.8-2(b) (Require spark-generating construction equipment to be equipped with manufacturer's recommended spark arresters)

**RESIDUAL SIGNIFICANCE:**

Less than significant

The impact and mitigation would be the same for both development scenarios. The reader is referred to discussion of Impact 4.8-5(A).

## **4.8.5 MITIGATION MEASURES**

### **UNKNOWN HAZARDS RELATED TO PAST USES**

Mitigation Measure 4.8-1 applies to Impacts 4.8-3(A) and (B).

#### **Mitigation Measure 4.8-1: Remediate site hazards, if discovered.**

If evidence of soil contamination is encountered, work shall cease until the area can be tested, and, if necessary, remediated. As part of this process, the City shall ensure that any necessary investigation and/or remediation activities conducted in the Plan Area are coordinated with Roseville Fire Department, Placer County Division of Environmental Health, and, if needed, other appropriate state agencies. Once the site is remediated, construction can continue. The City shall also continue to update its records concerning contamination or hazards that may be present at facilities or sites adjacent to the Plan Area, and take necessary action to ensure that the health and safety of the public is protected.

### **HAZARDS RELATED TO FIRE**

Mitigation Measures 4.8-2(a) and 4.8-2(b) apply to Impacts 4.8-5(A) and (B).

**Mitigation Measure 4.8-2(a): Clear areas slated for construction activities of materials that could serve as fire fuel prior to initiating these activities.**

During construction, staging areas, welding areas, or areas slated for development in the near future where equipment will be operating on dried vegetation or other materials that could serve as fire fuel would be cleared. The contractor will maintain areas subject to such construction activities clear of combustible natural materials to the extent feasible in order to maintain a fire break. This measure would minimize the availability of fire fuels.

**Mitigation Measure 4.8-2(b): Require spark-generating construction equipment to be equipped with manufacturer's recommended spark arresters.**

Any construction equipment that normally includes a spark arrester is to be equipped with such an arrester in good working order. This includes, but is not limited to, heavy equipment and chainsaws. This mitigation measure would minimize a source of construction-related fire.

If underground tanks or other features or materials that could present a threat to human health or the environment are discovered during construction, all work in the vicinity of the site shall stop. A qualified professional shall investigate the site and make recommendations for remediation, if necessary.

| <p><b>TABLE 4.8-1</b></p> <p><b>HAZARDOUS MATERIALS AND PUBLIC SAFETY</b></p> <p><b>RESIDUAL IMPACT SUMMARY</b></p> |                        |                             |
|---------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|
| <b>Impact</b>                                                                                                       | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
| 4.8-1(A and B) Increased potential for accidental release or spill of hazardous materials.                          | Less than significant  | Less than significant       |
| 4.8-2(A and B) Increased risk of contamination from improper disposal of household hazardous wastes.                | Less than significant  | Less than significant       |
| 4.8-3(A and B) Existing or unknown hazards related to past uses within the Plan Area.                               | Less than significant  | Less than significant       |
| 4.8-4(A and B) Potential effects of electromagnetic fields (EMFs).                                                  | Less than significant  | Less than significant       |
| 4.8-5(A and B) Increased fire potential.                                                                            | Less than significant  | Less than significant       |

## ENDNOTES

1. Harding Lawson Associates, *Preliminary Site Assessment, Phase I - Site History Oak Creek Business Park, Roseville, California*, September 19, 1988.
2. Raney Geotechnical, *Level 1 Environmental Site Assessment, Approximate 146-Acre Property APN 017-230-09, Roseville, California*, September 24, 1993.
3. Raney Geotechnical, Op. cit.
4. Kleinfelder Inc., *Second Phase Environmental Assessment, Sammis Roseville Properties, Roseville, California*, March 7, 1988.
5. Garcia, Eric, Department of Toxic Substances Control, Site Mitigation Unit. personal communication, June 15, 1995.
6. Raney Geotechnical, *Level I Environmental Site Assessment, Approximate 160-Acre Property APN 017-0110-005, Roseville, California*, January 3, 1994.
7. Raney Geotechnical, Op cit.
8. Wade Associates, *Sunset Industrial Area Public Facilities and Services Report*, June 1988.
9. Placer County, *General Plan Update, Draft General Plan Background Report, volume I*, September 25, 1992.
10. Anderson, Steve, Op. cit.
11. Inouye, G. Arnold, Associate Sanitation Engineer, Central Valley Regional Water Quality Control Board, personal communication, June 9, 1995.
12. Placer County, *Negative Declaration for the Northern California Power Agency Roseville Area Peaking Facility*, June 28, 1984.
13. Berry, Kirk, Roseville Police Department, Traffic Division. personal communication, June 13, 1995.
14. Anderson, Steve. Op. cit.
15. Sharp, Terry, Chief, Roseville Fire Department. personal communication, June 8, 1995.
16. City of Roseville, *Letter of Promulgation [for Emergency Plan]*, January 13, 1993.
17. Carman, Jeff, Battalion Chief, Roseville Fire Department. personal communication, June 6, 1995.



18. Davies, Roger, Supervising Registered Environmental Health Specialist, Placer County Department of Health & Human Services, Division of Environmental Health, personal communication, June 6, 1995.
19. City of Roseville, *General Plan 2010, Safety Element*, November 1992.
20. Placer County, *General Plan Update, Draft General Plan Background Report, volume II*. September 25, 1992.
21. Resource Management Inc., *City of Roseville Electric Department 230-6--kV Fiddymont Substation Project Initial Study/Negative Declaration*. December 1994.
22. California Energy Commission, *High-Voltage Transmission Lines: Summary of Health Effects Studies*. July 1992.
23. Pacific Gas and Electric, *Public Issue Policy Statement*, Revised, October 1990.
24. VanRemoortere, Mike, Electrical Engineer, Pacific Gas and Electric, May 24, 1991.
25. Ibid.
26. Hileman, Bette, "Health Effects of Electromagnetic Fields Remain Unresolved," *Chemical and Engineering News*, November 8, 1993.
27. Merritt, R.E. and B.J. Schussman, "*Fear of Cancer*" *EMF Litigation Squelched by Court of Appeal*. In: *Environmental Monitor*, Spring 1995.
28. Anderson, Steve, Hazardous Materials Officer, Roseville Fire Department. personal communication, June 6, 1995.
29. City of Roseville, *Comprehensive Land Use Element Project Update*, February 1995.
30. City of Roseville, *Del Webb Specific Plan Draft Environmental Impact Report*, September 1993.



---

---

## ***4.9 TRANSPORTATION AND CIRCULATION***

---

---





---

---

## ***4.9 TRANSPORTATION AND CIRCULATION***

---

---

### **4.9.1 INTRODUCTION**

The evaluation of the operating characteristics of the existing circulation system in the City of Roseville is the initial task in defining impacts of the Proposed Project on the circulation system. In order to understand existing travel patterns and conditions, all major aspects of transportation in Roseville were inventoried and analyzed.

In order to provide a conservative (i.e., worst-case) analysis, the Year 2010 was used as the baseline against which impacts are measured. The effects of the Proposed Project on existing conditions are discussed in Appendix D.

### **4.9.2 ENVIRONMENTAL SETTING**

#### **Regional Setting**

The following sections briefly discuss roadway functions, traffic volumes, and traffic levels of service, as well as transit, truck and rail services, and bicycle routes.

#### **Streets and Highways**

##### **Roadway Functional Classification**

The existing street network in the City of Roseville is a product both of roadways that have provided access to the older portions of the City for decades and of roadways that were designed to serve newer specific plan areas. In each of the City's five specific plan areas and the North Industrial Area, arterial and collector roadway classifications have been defined and a number of these roadways have been constructed. In the older portions of the City, roadways were classified as arterial or collector roadways in the 1992 General Plan Update.

The primary function of arterial roadways is to move large volumes of traffic through the City to other sections and beyond. In the specific plan areas, the right-of-way for arterials varies from 76 feet to 100 feet and generally incorporates four to six travel lanes, bicycle lanes, and a landscaped median. On-street parking on arterials in the specific plan areas is prohibited, and access is limited to minimize cross traffic turning movements in order to improve traffic safety and allow more efficient traffic flow. Outside the specific plan areas, some roadways function as arterials due to the current high traffic volumes and their key linkages between one section of the City and another. For these roadways, current right-of-way widths vary, but most contain more than two traffic lanes.

Collector streets generally link local residential streets and the commercial and office parking areas to the arterials. In the specific plan areas, the right-of-way for these streets varies from 54 feet to 60 feet and contains two traffic lanes and bicycle lanes. Outside the specific plan areas, a number of roadways function as collector roadways due to moderate traffic volumes and their linkage to the arterial roadway system. The right-of-way widths for these roadways vary, but most contain two traffic lanes.

Table 4.9-1 provides a summary of the existing arterial and collector roadways in the five specific plan areas as well as the Infill and North Industrial areas. Figure 4.9-1, existing Arterial/Collector Roadway System, illustrates the arterial/collector roadway system that currently serves the City of Roseville. It should be noted that some roadways in the specific plan areas are not currently constructed and therefore, are not included in Table 4.9-1. As noted in the table, other roadways are only partially complete. Also included on Figure 4.9-1 is the state highway system that serves the Roseville area.

There is a limited roadway system in the study area that directly serves the vicinity of the Proposed Project. There are no existing roadways in the City of Roseville that directly serve the location of Phase I of the Proposed Project. Fiddymment Road, Pleasant Grove Boulevard and Baseline Road are roadways that directly serve the Phase II area. Blue Oaks Boulevard was recently constructed between Foothills Boulevard and Fiddymment Road and will serve Phase I and portions of Phase II.

The existing state highway and arterial systems within the City of Roseville are described below.

#### State Highway System

Roseville is served by an interstate highway (I-80) and a state highway (State Route 65 [SR65]). I-80 is a transcontinental highway that links Roseville not only to Sacramento and the Bay Area, but to the rest of the United States via its crossing of the Sierras. It carries commute traffic between Placer and Sacramento counties, as well as interregional and interstate business, freight, tourist, and recreational travel. Roseville is connected to I-80 by five interchanges: Riverside Avenue, Douglas Boulevard, Eureka Road/Atlantic Street, Taylor Road, and SR65. This freeway has eight lanes west of Riverside Avenue and six lanes through the remainder of Roseville. The traffic volumes range from 130,000 vehicles per day (veh/day) west of Riverside Avenue to 94,000 veh/day west of SR65.

SR65 is generally a north-south State Route that connects Roseville with the cities of Lincoln and Marysville (via Highway 70). This highway is a four-lane freeway between I-80 and Blue Oaks Boulevard and a two-lane conventional highway north of Blue Oaks Boulevard. Access to SR65 is provided by three interchanges: I-80, Harding Boulevard/Stanford Ranch Road, and Blue Oaks Boulevard (partial interchange). Traffic volumes range from about 30,000 veh/day between I-80 and Harding to 16,800 veh/day north of Blue Oaks.

#### Arterial Street System

The arterial network may be the most important system of roads within the overall street system. It links residential areas to both commercial and employment centers and links all of these uses to



TABLE 4.9-1

ARTERIAL AND COLLECTOR SYSTEM IN THE CITY OF ROSEVILLE<sup>1</sup>

| Subarea                               | Arterials                                                                                                                                                                                                                                                                             | Collectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infill                                | Vernon Street (north of Cirby)<br>Atlantic Street (Vernon to I-80)<br>Cirby Way<br>Riverside Avenue<br>Auburn Boulevard<br>Roseville Road<br>Harding Boulevard (north of Douglas)<br>Douglas Boulevard<br>Atkinson Street (south of Foothills)<br>Rocky Ridge Drive<br>Sunrise Avenue | Main Street<br>Folsom Road<br>Vineyard Road<br>Church Street (west of Washington)<br>Atkinson Street (Foothills to Main)<br>Shasta Street (north of Yosemite)<br>Vernon Street (south of Cirby)<br>Sutter Avenue<br>Lincoln Street (Sierra to Main and Vernon to Sutter)<br>Oak Street (Judah to Lincoln)<br>Grant Street<br>Judah Street<br>Estates Drive<br>Melody Lane<br>West Whyte Avenue<br>Oak Ridge Drive<br>Orlando Avenue<br>Berry Street<br>Yosemite Street<br>Old Auburn Road (South Cirby to Sacramento County Line) |
| Northwest Roseville Specific Plan     | Pleasant Grove Boulevard<br>Foothills Boulevard<br>Woodcreek Oaks Boulevard <sup>2</sup><br>Junction Boulevard<br>Washington Boulevard<br>Baseline Road                                                                                                                               | Country Club Drive<br>McAnally Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| North Central Roseville Specific Plan | Washington Boulevard<br>Harding Boulevard/Stanford Ranch Road<br>Roseville Parkway<br>Pleasant Grove Boulevard <sup>2</sup>                                                                                                                                                           | Hallisey Drive<br>Diamond Oaks Road<br>Gibson Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Northeast Roseville Specific Plan     | Sunrise Avenue <sup>2</sup><br>Roseville Parkway <sup>2</sup><br>Eureka Road<br>Douglas Boulevard<br>Sierra College Boulevard<br>Taylor Road                                                                                                                                          | Lead Hill Road<br>Rocky Ridge Drive (north of Douglas Road)<br>Olympus Drive                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Southeast Roseville Specific Plan     | Douglas Boulevard<br>Roseville Parkway<br>Sierra College Boulevard<br>Eureka Road<br>Rocky Ridge Drive (south of Douglas Boulevard)                                                                                                                                                   | Johnson Ranch Drive<br>McLaren Drive<br>Professional Drive<br>Parkhill Road<br>Old Auburn Road (south Cirby to Roseville Parkway)<br>North Cirby Way                                                                                                                                                                                                                                                                                                                                                                              |
| Del Webb Specific Plan                | Fiddymont Road<br>Blue Oaks Boulevard<br>Pleasant Grove Boulevard                                                                                                                                                                                                                     | Del Webb Boulevard<br>Sun City Boulevard <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| North Roseville Industrial Area       | Washington Boulevard<br>Industrial Avenue<br>Foothills Boulevard<br>Blue Oaks Boulevard <sup>2</sup><br>Woodcreek Oaks Boulevard <sup>2</sup>                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

SOURCE: City of Roseville, 1992.

## Notes:

1. See Figure 4.9-1. Some roadways are not constructed, and have not been reflected on the table or Figure 4.9-1.
2. Portions of roadway have not yet been completed.





Figure 4.9-1  
Existing Arterial/Collector  
Roadway System

North Roseville  
Specific Plan EIR

Freeway  
Arterial  
Collector





#### 4.9 Transportation and Circulation

the regional freeway system. The existing arterial network in the City of Roseville is described below. The traffic volumes associated with each roadway are based on traffic counts collected between 1993 and 1995. In some instances, traffic volumes are not included because the most recent count data available were collected prior to 1993 and may no longer be an accurate indication of current traffic conditions. The traffic volume data was collected prior to the construction of the Pleasant Grove overcrossing of the UPRR and the extension of Blue Oaks Boulevard to Fiddymont Road. More recent traffic data has not yet been collected. The addition of these projects may cause a significant shift in travel patterns in the northern and western portions of the city.

Atkinson Street is a north-south roadway that connects PFE Road to Main Street. South of Foothills Boulevard, it is a two-lane arterial that serves 8,000 veh/day (just north of PFE Road). Between Foothills Boulevard and Vineyard Road it is a two-lane collector. North of Vineyard Road it is a local roadway that currently carries 2,900 veh/day.

Atlantic Street connects downtown Roseville to I-80 as well as to the Northeast Specific Plan Area via Eureka Road. It is four lanes wide at I-80 but narrows to two lanes west of Harding Boulevard. It remains two lanes until it changes into Vernon Street in the downtown area. Between Vernon Street and Harding Boulevard, Atlantic Street carries about 16,700 veh/day. Both Eureka Road and Atlantic Street handle moderate daily traffic volumes (21,800 veh/day and 25,000 veh/day, respectively) in the vicinity of the I-80 interchange.

Baseline Road is an east-west arterial that links west Roseville with the Dry Creek Area and SR-99. Baseline Road is a two-lane road from the City limits to Woodcreek Oaks Boulevard from Woodcreek Oaks to Foothills Boulevard (where Baseline becomes Main Street). Baseline Road has two west-bound and one eastbound lane. Daily volumes on Baseline Road east of Country Club Drive are about 8,700 veh/day.

Eureka Road is a major east–west arterial that links southeast Roseville to northeast Roseville and provides access to I-80 and downtown Roseville via Atlantic Street. Eureka Road contains four lanes from Sierra College Boulevard to south of Douglas Boulevard. From there it widens to six lanes and continues roughly northwest until it intersects with I-80. Daily traffic volumes on Eureka Road are heaviest between Sunrise Avenue and Rocky Ridge Drive (32,000 veh/day).

Fiddymment Road is a two-lane, north–south arterial that runs along the western city limit of Roseville from Baseline Road north into Placer County. Daily traffic volumes on Fiddymment Road are approximately 5,000 veh/day.

Foothills Boulevard is the major north–south arterial in Roseville west of I-80. It extends as far south as Cirby Way, where it becomes Roseville Road and continues south into Sacramento, and continues north to the northern city limits. This roadway (along with Washington Boulevard, Harding Boulevard and SR65) provides one of only four grade-separated crossings of the Union Pacific railroad mainline. This four-lane arterial serves its highest daily volume south of Atkinson Road (39,800 veh/day in 1996). Significant daily volumes also occur between Baseline Road and Junction Boulevard (24,600 veh/day).

Harding Boulevard is a major north–south arterial that runs from Douglas Boulevard to SR65. From Douglas Boulevard to Atlantic Street, this four-lane arterial parallels I-80, serving a commercial area with daily traffic volumes that range from 13,500 veh/day (north of Douglas Boulevard) to 14,000 veh/day (south of Atlantic Street). Harding Boulevard was recently extended over the Union Pacific mainline through the NCRSP area to SR65. Traffic volumes on this section of Harding Boulevard average 13,800 veh/day.

Industrial Avenue extends from Washington Boulevard north, past the north city limit of Roseville, and into the Sunset General Plan Area. It is a two-lane arterial that runs north–south and serves 1,900 veh/day (south of Blue Oaks Boulevard).

Junction Boulevard is an east–west arterial in west Roseville that has four lanes east of Foothills Boulevard and four lanes west of Foothills Boulevard. Daily volumes on Junction Boulevard reach 15,400 veh/day between Foothills Boulevard and Washington Boulevard but drop west of Foothills Boulevard to 11,300 veh/day.

Pleasant Grove Boulevard is an east–west arterial that extends from Fiddymment Road to Roseville Parkway and connects the Del Webb Specific Plan to the Northwest Roseville Specific Plan and North Central Roseville Specific Plan. It is a two-lane facility between Fiddymment Road and Woodcreek Oaks Boulevard, and a four-lane facility between Woodcreek Oaks and Foothills Boulevard. From Foothills Boulevard to Roseville Parkway it is a six-lane facility. Daily traffic volumes on Pleasant Grove Boulevard range from 8,400 veh/day west of Foothills Boulevard to 3,300 west of Woodcreek Oaks.

Riverside Avenue extends north from Auburn Boulevard (Sacramento County) as a major north–south arterial. It connects south/central Roseville to I-80 and Sacramento County. Auburn Boulevard is a four-lane arterial that extends from the Sacramento County line north to I-80, where



#### 4.9 Transportation and Circulation

it becomes Riverside Avenue. Riverside Avenue continues north from I-80 to Douglas Boulevard and Vernon Street. Riverside Avenue has four lanes south of 6th Street and two lanes north of 6th Street. Both Auburn Boulevard and Riverside Avenue serve heavy daily traffic volumes near the I-80 interchange (29,300 veh/day and 44,300 veh/day, respectively).

Rocky Ridge Drive is a four-lane north-south arterial that begins at Cirby Way and extends north to Roseville Parkway. Daily traffic volumes on Rocky Ridge Drive range from 19,400 veh/day north of Cirby Way to 9,600 veh/day between Douglas Boulevard and Lead Hill Road.

Roseville Parkway is an arterial that will eventually link the Southeast, Northeast and North Central Specific Plan areas, as well as the North Industrial Area. From Placer County east of Roseville to Sierra College Boulevard, it is two lanes wide. From Sierra College Boulevard to Douglas Boulevard, it is four lanes wide and serves an average daily traffic of 11,200 veh/day. North of Douglas Boulevard, until it ends at Rocky Ridge Drive, it is six lanes wide and carries a daily traffic volume of 4,400 veh/day. Roseville Parkway was recently constructed between Harding Boulevard and Pleasant Grove Boulevard with six lanes, and between Pleasant Grove Boulevard and Washington Boulevard with two lanes.

Roseville Road is a north-south arterial that extends south from Foothills Boulevard and runs parallel to I-80 from the end of Cirby Way to the southern city limit of Roseville. This two-lane arterial serves 9,600 veh/day.

Sierra College Boulevard is another major north-south arterial on the eastern border of Roseville. Portions of this roadway have two lanes while other portions have four lanes. This arterial carries between 23,600 veh/day south of Old Auburn Road and 19,500 veh/day south of Douglas Boulevard.

Washington Boulevard is a major north–south arterial. It connects SR65 and Blue Oaks Boulevard to Vernon Street and terminates at Oak Street in downtown Roseville. From Blue Oaks Boulevard to north of Junction Boulevard, it is a two-lane road that serves between 3,600 veh/day (south of Blue Oaks Boulevard) to 9,000 veh/day (south of Diamond Oaks Road). From Junction Boulevard to Oak Street, it is a four-lane arterial on which the maximum daily volume is 22,900 veh/day (south of Main Street). Along with Foothills Boulevard and SR65, it provides one of three grade-separated crossings of the Union Pacific mainline tracks.

Woodcreek Oaks Boulevard is a north–south arterial that extends from Baseline Road to north of Pleasant Grove Boulevard. From Baseline Road to Junction Boulevard it is a four-lane road. From Junction Boulevard to its northern terminus it is a two-lane road.

### Traffic Volumes

One of the key evaluation measures of a city's roadway system is a comparison of daily and peak period traffic volumes on its major roadway system. The traffic data used in this existing conditions analysis were provided by the following:

- City of Roseville Public Works Department (1995 - 1996 traffic count data);
- Sacramento County 1994 Traffic Volumes Flow Map;
- Caltrans *1994 Traffic Volumes on State Highways*; and
- Placer County Traffic Count Data (1993–1995).

Average daily traffic volumes (ADT) represent the total volume passing a point or segment of roadway, in both directions, on an average weekday. ADTs on the functional network are shown on Figure 4.9-2, Existing Daily Traffic Volumes.

### Traffic Levels of Service

The evaluation of traffic volumes on the roadway network provides an understanding of the general nature of travel conditions in the City of Roseville. However, traffic volumes do not indicate the quality of service provided by the street facilities nor the ability of the street network to carry additional traffic. To accomplish this, the concept of "level of service" has been developed. Under the General Plan, the City of Roseville has set a standard of LOS "C" for its roadway system. Consequently, LOS "A," "B" and "C" are considered acceptable, while "D," "E," and "F" are unacceptable. The General Plan level of service policy, however, would allow LOS "D" at locations in the City's infill area where the City decides that the impacts and/or costs of the required improvements are not worth the benefits of having LOS "C" for all hours of the day.

Intersections control the traffic flow and capacity of Roseville's arterial/collector system. As in the 1992 General Plan Update, intersection operations were evaluated using the Transportation Research Board Circular 212 (critical movement) method. Table 4.9-2 presents the level of service categories







TABLE 4.9-2

## LEVEL OF SERVICE DEFINITIONS AT SIGNALIZED INTERSECTIONS

| Level of Service (LOS) | Volume to Capacity Ratio <sup>1</sup> | Description                                                                                                                                                                      |
|------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A                      | 0.00-0.59                             | Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red signal indication.                                       |
| B                      | 0.60-0.69                             | Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles.                     |
| C <sup>2</sup>         | 0.70-0.81                             | Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.                                                                 |
| D                      | 0.82-0.89                             | Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays. |
| E                      | 0.90-0.99                             | Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.                |
| F                      | ≥ 1                                   | Forced Flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.                      |

## Notes:

1. The ratio of the traffic volume demand at an intersection to the capacity of the intersection.
2. The City of Roseville has established a volume-to-capacity ratio of 0.81 as the LOS C threshold.

SOURCE: Transportation Research Board, 1985.

for signalized intersections considered in this analysis and provides a definition of each category with the corresponding volume-to-capacity ratios. The p.m. peak hour is used in the operational analysis of the City's roadway system since it generally represents the highest hour for overall traffic volumes during the day. Table 4.9-3 summarizes the existing levels of service during the p.m. peak hour at 15 key intersections in the vicinity of the Proposed Project site both within and outside the City, based on turning movement volumes collected by the City in 1995 - 1996.

## Transit

Transit service is currently provided to the residents of the City of Roseville by two transit providers: Roseville Transit Services and Placer County Transit. Their current transit routes are shown on Figure 4.9-3, Existing Transit Routes. Other transit systems in Roseville include Roseville Area Dial-A-Ride (RADAR), taxicab services, Greyhound Bus Lines, and Amtrak. These existing transit services are described below.

**Roseville Commuter Service** is a fixed-route scheduled transit system operated by the City of Roseville. It provides commute service between Roseville and downtown Sacramento. There are currently four runs in each direction during both the a.m. (6 a.m. to 8 a.m.) and p.m. (4 p.m. to 6 p.m.) peak periods. Figure 4.9-3 shows the Roseville end of the transit route.

**Roseville Fixed-Route** (Formerly RUSH) is a fixed-route, scheduled transit system operated by the City of Roseville within the city limits. There are currently seven scheduled routes. Six routes are "hubbed" at the Sierra Gardens Transfer Point. Timed transfer between routes take place every 30 minutes. Approximately one-half of the Roseville Transit riders are elderly and disabled; at this time few commuters use the system. The Roseville Transit system connects to both Placer County Transit and Sacramento Regional Transit.

**Placer County Transit** is a fixed-route scheduled transit system operated by Placer County that principally serves the I-80 and Highway 49 corridors. Some of the routes are "deviated." A "deviated route" means that the buses generally travel on a main route (i.e., I-80) but can deviate from that route up to a certain distance (one-quarter mile in the case of Placer County Transit) to serve the specific needs of transit patrons. Currently, there are eleven runs a day between Auburn and Roseville. This route does not deviate and its buses connect with Roseville Transit and Sacramento Regional Transit.

**RADAR** is a curb-to-curb system operated by the City of Roseville within its city limits, seven days a week. As a "dial-a-ride" service, it does not operate on fixed-route schedules; 75 percent of its ridership is elderly and disabled.

**Greyhound Bus Lines** has a station at the intermodal facility (the Amtrak station) in Roseville. This station is a stop on the Sacramento to Auburn route and offers six to seven trips to Sacramento per day. From Sacramento, passengers can continue to destinations in any direction.

**Amtrak** provides intercity rail service to Placer County via stations in Roseville and Colfax. The "California Zephyr" provides east-west service between Chicago and Oakland with one Roseville



**TABLE 4.9-3****EXISTING LEVELS OF SERVICE AT SIGNALIZED INTERSECTIONS  
(P.M. Peak Hour)**

| <b>Intersection</b>                             | <b>Volume/Capacity Ratio</b> | <b>Level of Service</b> |
|-------------------------------------------------|------------------------------|-------------------------|
| Washington Blvd. at Blue Oaks Blvd.             | 0.63                         | B                       |
| Foothills Blvd. at Blue Oaks Blvd. <sup>1</sup> | 0.33                         | A                       |
| Foothills Blvd. at Pleasant Grove Blvd.         | 0.49                         | A                       |
| Foothills Blvd. at Junction Blvd.               | 0.56                         | A                       |
| Foothills Blvd. at Baseline Rd./Main St.        | 0.71                         | C                       |
| Foothills Blvd. at Cirby Way                    | 0.77                         | C                       |
| Riverside Ave. at Cirby Way                     | 0.99                         | E                       |
| Washington Blvd. at Pleasant Grove Blvd.        | 0.26                         | A                       |
| Washington Blvd. at Junction Blvd.              | 0.47                         | A                       |
| Washington Blvd. at Main St.                    | 0.59                         | A                       |
| Woodcreek Oaks Blvd. at Pleasant Grove Blvd.    | 0.27                         | A                       |
| Woodcreek Oaks Blvd. at Junction Blvd.          | 0.26                         | A                       |
| Woodcreek Oaks Blvd. at Baseline Rd.            | 0.69                         | B                       |
| Fiddymment Rd. at Baseline Rd.                  | n/a <sup>2</sup>             | A                       |
| Fiddymment Rd. at Pleasant Grove Blvd.          | n/a <sup>2</sup>             | A                       |
| Sun City Blvd. at Pleasant Grove Blvd.          | 0.07                         | A                       |
| Fiddymment Rd. at Del Webb Blvd.                | n/a <sup>2</sup>             | A                       |

**Notes:**

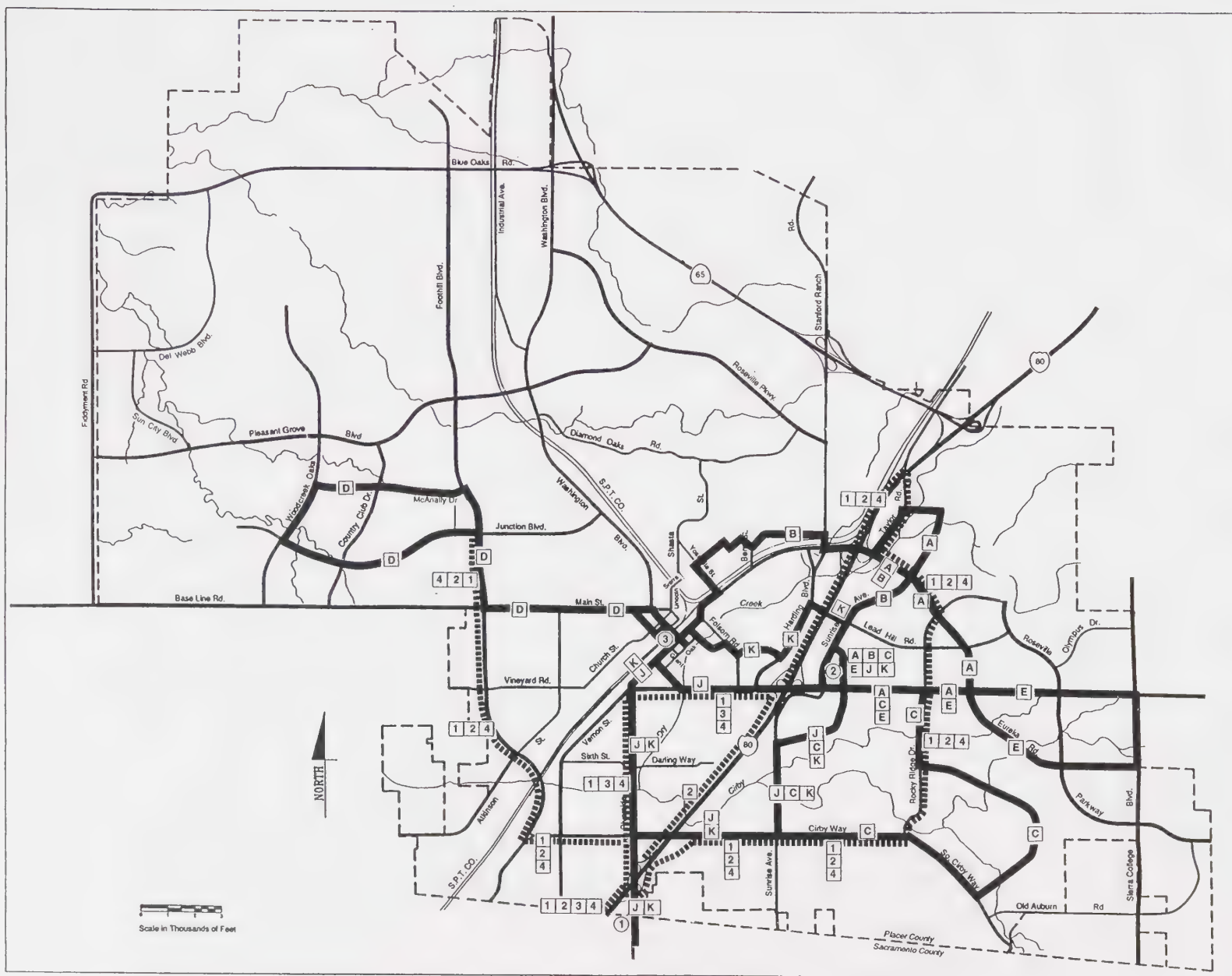
1. Although not currently signalized, intersection meets signal warrants and is planned for traffic signalization in near future. Therefore, the traffic analysis assumes signalization at this location.
2. Stop-controlled intersection; volume-to-capacity ratio does not apply.

Source: DKS Associates, 1995.



Figure 4.9-3  
Existing Transit Routes

North Roseville  
Specific Plan EIR



Key:  
 — A B C — Roseville Transit  
 - - - 1 2 3 - - - Roseville Transit Commuter  
 — 1 2 3 — Placer Co. Transit

- Transfer Points:
- ① Auburn Blvd. (at K-Mart)  
 Roseville Transit  
 Placer Co. Transit  
 Sacramento RT
  - ② Santa Clara Drive  
 Roseville Transit  
 Placer Transit
  - ③ City Hall  
 Roseville Transit  
 Placer Co. Transit

NOTE: Roseville Transit Route "A" not in operation until July 1997.





stop in each direction daily. Placer County residents can also access the California Zephyr at Truckee in Nevada County. Other Amtrak trains can be accessed at Sacramento, or by using the Amtrak Thruway Bus Connections to Roseville.

**Capital Corridor Intercity Rail** began operation in December 1991. This service links the Bay Area with the Sacramento area and Placer County. At present, one round trip train accesses Roseville daily. Additional trains and an extension as far as Rocklin and Bowman are planned.

Taxi service is provided by several private companies.

Roseville is not served by Regional Transit's light rail transit (LRT) system, but an extension of LRT to Roseville is proposed in Roseville's "Long Range Master Transit Plan."

## Bicycles

### Bikeway Classification

Bikeways are defined as specific routes and classes which meet minimum design standards. Roseville generally follows Caltrans' design standards for the following classes of bikeways:

- Class I bikeways, which provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized. Class I bikeways are a minimum of 10 feet wide if two directional, 5 feet wide if one-way; however, the City of Roseville typically constructs 12-foot wide Class I bikeways when a high volume of bicycle traffic is expected. A 2-foot graded area should parallel the bikeway on both sides, and the bikeway should be a minimum of 5 feet from an adjacent roadway.
- Class II bikeways, which provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with adjacent vehicle parking and crossflows by pedestrians and motorists permitted. In situations where vehicle parking is permitted adjacent to a Class II bikeway, the bike lane is typically wider (5 feet) and the pavement is striped to separate the bike and parking lanes. Class II bikeways are typically 4 feet wide in Roseville and separated from vehicle traffic by a solid white stripe.
- Class III bikeways, which provide a right-of-way designated by signs or permanent markings, are shared with pedestrians or motorists.

In addition, Roseville has an additional classification for bikeways.

- Class IA facilities are bicycle paths that have been developed as parallel sidewalk routes along major roadways and are separated from the roadway by a landscape strip. Caltrans does not consider sidewalk facilities to be Class I facilities, and does

not recommend that they be signed as bicycle routes. However, Class IA facilities are still desirable for bicyclists of lower skill levels, such as children, as well as others who are hesitant to utilize on-street routes.

The City of Roseville recently adopted a Bikeway Master Plan, which provides guidelines for the development of a city-wide network of Class I, II, and III bicycle facilities and design standards (based on Caltrans standards) for new bicycle facilities within Roseville.

### Existing Bikeways

Figure 4.9-4, Existing Bike Routes, shows the existing bikeways within Roseville city limits and all points where Roseville bikeways connect with Placer County bicycle routes. Each of the five specific plan areas contain significant bikeway elements within the plan areas. The existing bikeways in the City's infill area and its specific plan areas are described below:

**Infill Area.** Existing Class I bicycle paths include route segments located in the floodways of Dry Creek through Royer Park, Cirby Creek, and Linda Creek, a small route from the end of Sierra Gardens Drive to Meadowlark, and for a portion of Sunrise Avenue between Sandringham and Kensington Drives. Developed Class II bicycle lanes are located along Harding Boulevard from Lead Hill Road to Atlantic Street and Sierra Gardens Drive between Douglas Boulevard and Santa Clara Drive. A Class III bicycle route exists along Keehner Avenue from Darling Way to Douglas Boulevard.

Folsom Road from Sutter Avenue to Douglas Boulevard was once a Class II bicycle lane, but is not now. The extra road width required for the placement of a left-turn lane on Folsom Road at Estates Drive was attained by removing the bicycle lane. In addition, according to the City's Engineering Department, Nevada, Ben Ezra, and Donner Avenues are no longer Class III bicycle routes.

**Northwest Roseville Specific Plan Area.** The Specific Plan includes Class IA and Class II bikeways along Woodcreek Oaks Boulevard, Country Club Drive, Foothills Boulevard, Junction Boulevard, Wakefield Road, Pleasant Grove Boulevard and portions of Baseline Road. Sections of this system have been developed. The specific plan also describes several recreation bicycling routes, along the power line easements from west of Woodcreek Oaks Boulevard to Washington Boulevard, through the floodway along Pleasant Grove Creek, and through the floodway of the South Branch of Pleasant Grove Creek to Parcel 21 (a 10-acre school site) and then south to connect with the power line easement bicycle trail. This bikeway system has not yet been fully developed. Class II bicycle facilities on newly constructed roadways are in place.

**North Central Roseville Specific Plan Area.** This Specific Plan shows Class IA bicycle paths and Class II bicycle lanes along Washington Boulevard north of Pleasant Grove Boulevard, Roseville Parkway, Pleasant Grove Boulevard, Harding Boulevard, Eastpark Drive and Collector D. Class II facilities were included on the recently constructed roadways in this specific plan area. These include Roseville Parkway, Pleasant Grove Boulevard, and Harding Boulevard. Additional Class I bicycle paths are planned along lower watersheds, Antelope Creek, wetland preserves and adjacent to SR65. Additional Class II bicycle lanes are planned along residential collectors. Two Class III



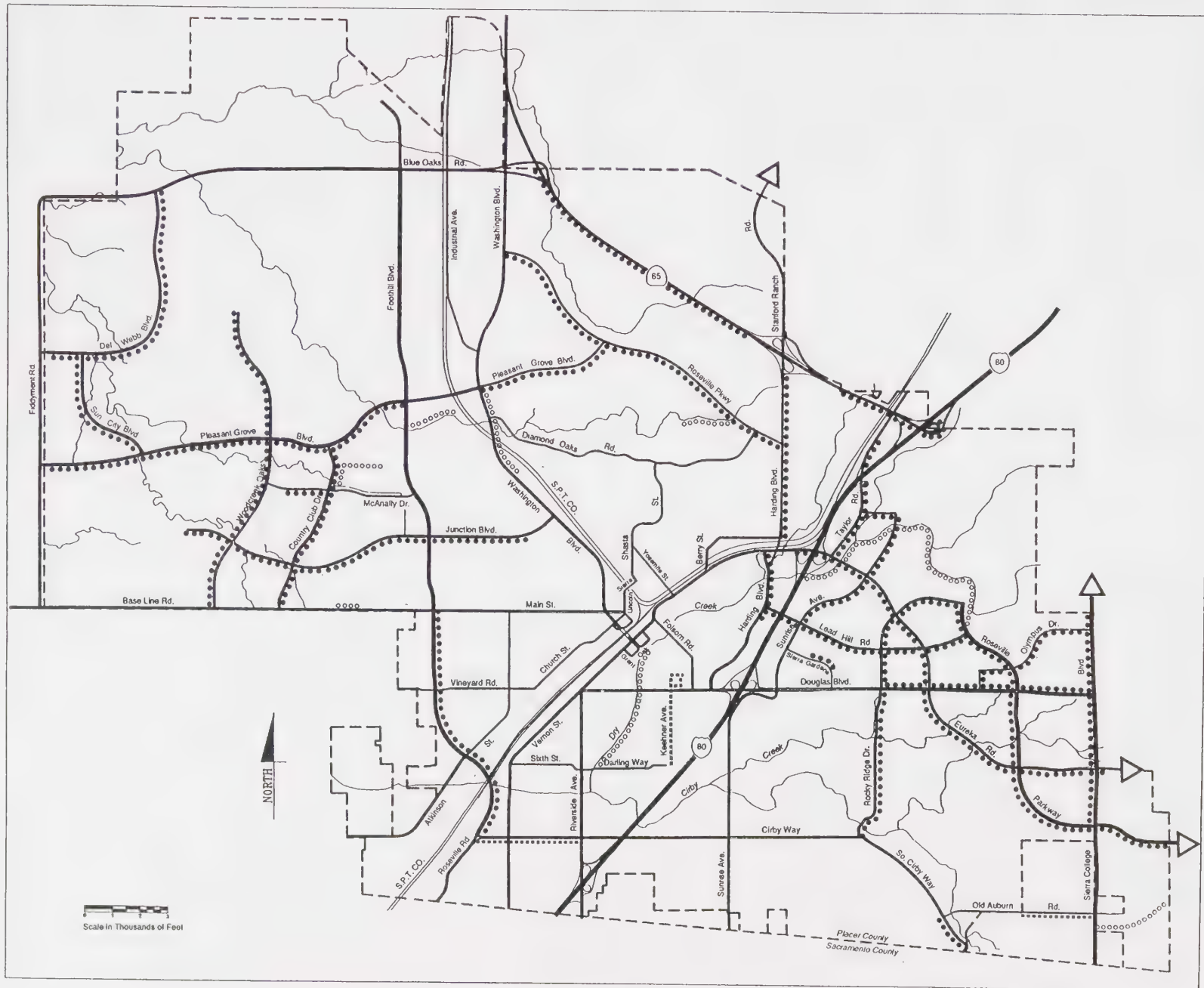


Figure 4.9-4  
Existing Bike Routes

North Roseville  
Specific Plan EIR

- Class I/IA
- ..... Class II
- Class III
- △ Regional Connections



bicycle route segments are planned to connect portions of the on-street Class I paths to the lower watershed areas. All local residential streets will be designated as Class III bicycle routes.

**Northeast Roseville Specific Plan Area.** This Specific Plan includes a bicycle trail along Miners Ravine extending from near the intersection of Taylor and Eureka Roads all the way along the Ravine, with a leg branching off to connect with Lead Hill Road and Roseville Parkway. The plan does not specifically show a bikeway system within the road rights-of-way, but does include an implementation policy to "include on-street bikeways for commuter bicycle use." Class I and Class II bikeways have been included in or are planned in the development of Eureka Road, Lead Hill Road, East Roseville Parkway, North Sunrise Avenue, Rocky Ridge Drive, Douglas Boulevard, Sierra College Boulevard, and portions of Olympus Drive.

**Southeast Roseville Specific Plan Area.** According to this Specific Plan, Class IA and II bikeways are included within the rights-of-way of Eureka Road and Roseville Parkway from Douglas Boulevard to Sierra College Boulevard. Field inspection reveals that the section of Douglas Boulevard between Eureka Road and Sierra College Boulevard includes a Class II bicycle lane.

**Del Webb Specific Plan Area.** This Specific Plan includes off-street Class IA and on-street Class II bicycle lanes proposed as part of the development of Blue Oaks Boulevard, Fiddymment Road, Pleasant Grove Boulevard, Sun City Boulevard, and Del Webb Boulevard, some of which have already been constructed. A system of on-street Class II bicycle lanes will also be provided along the local roads within the plan area, and will provide linkages to the proposed Pleasant Grove Creek bicycle trail and Mahany Regional Park (via Pleasant Grove Boulevard).

## Trucks

Figure 4.9-5, Existing Truck Routes, shows the existing designated truck routes within the Roseville city limits. These include the following:

- I-80;
- SR65;
- Baseline Road west of Foothills Boulevard;
- Foothills Boulevard south of Baseline Road;
- Cirby Way between Foothills Boulevard and Sunrise Avenue;
- Roseville Road south of Cirby Way;
- Riverside Avenue/Auburn Boulevard south of Cirby Way;
- Sunrise Avenue south of Cirby Way;
- Douglas Boulevard between Eureka Road and Sierra College Boulevard;
- Eureka Road between Douglas Boulevard and I-80;
- Sierra College Boulevard; and
- Blue Oak Boulevard between Fiddymment Road and SR65.

These truck routes link with Sacramento County's designated truck routes on Roseville Road, Auburn Boulevard, Sunrise Boulevard, and Hazel Avenue.





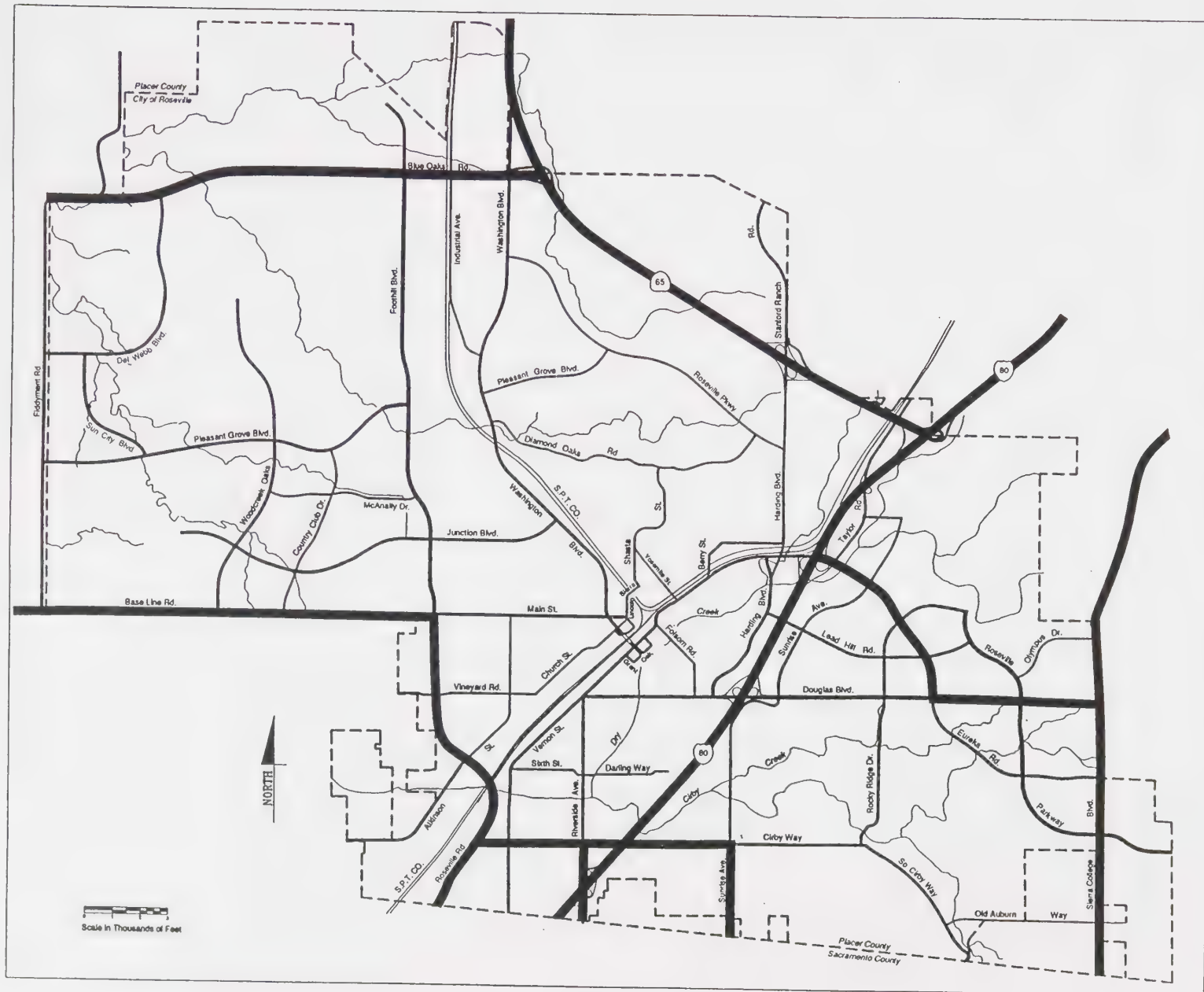


Figure 4.9-5  
Existing Truck Routes

North Roseville  
Specific Plan EIR

Truck Routes





## Rail

Union Pacific's (formerly Southern Pacific) transcontinental rail line and its switching yard and maintenance facilities have played a major role in Roseville's history. The railroad facilities in the City have and will continue to have a significant effect on the area's economy. However, the railroad tracks and yard create a substantial barrier to both pedestrian and automobile circulation. They concentrate vehicle traffic into a limited number of crossings and thereby have a large influence on travel patterns through the City.

Figure 4.9-6, Existing Railroad Facilities, shows the major rail lines that serve the City of Roseville, as well as existing crossings of these rail lines (both at-grade and grade-separated crossings).

The main line of the Union Pacific tracks crosses under SR65 adjacent to Taylor Road. It then follows I-80 south to Atlantic Street, which it follows into downtown Roseville. It then connects with a northern spur and enters the Roseville switching yard. Adjacent land use in this vicinity is a mixture of commercial, industrial, and residential land use. The switching yard then continues south past the city limits. There are only two at-grade crossings in the city limits, at Yosemite Street and Berry Street. The rail line crosses under Harding Boulevard, over Washington Boulevard and under Foothills Boulevard, which together with SR65 are the only four grade-separated crossings of the Union Pacific main line tracks (see Figure 4.9-6).

The northern spur of the Union Pacific rail line crosses under Blue Oaks Boulevard, adjacent to Industrial Avenue and under Pleasant Grove Boulevard. The rail continues south and crosses over Washington Boulevard and under Sierra Boulevard before it joins the main line near the downtown area. There are no at-grade crossings of this spur line. The three grade-separated crossings (at Blue Oaks Boulevard, Washington Boulevard, and Sierra Boulevard) are shown on Figure 4.9-6. The Pleasant Grove at-grade crossing of this spur is under construction and is scheduled to be completed by summer of 1997.

Amtrak provides commuter rail service to the City. See discussion under the transit section, above.

## Aviation

There are no existing aviation facilities within the city limits of Roseville. The nearest general aviation airport is the Lincoln Airport, located roughly 10 miles north of Roseville along SR65. Other general aviation airports in the vicinity are the Auburn Airport, located approximately 20 miles northeast of Roseville near Highway 49, north of I-80, Natomas Airport, located approximately 14 miles southwest of Roseville, Rio Linda Airport, approximately 11 miles southwest of Roseville, and the Sacramento Metropolitan Airport, located 25 miles southwest of Roseville along Interstate 5 north of I-80. McClellan Air Force Base is also near Roseville. It is located north of I-80 about 7 miles southwest of the City.



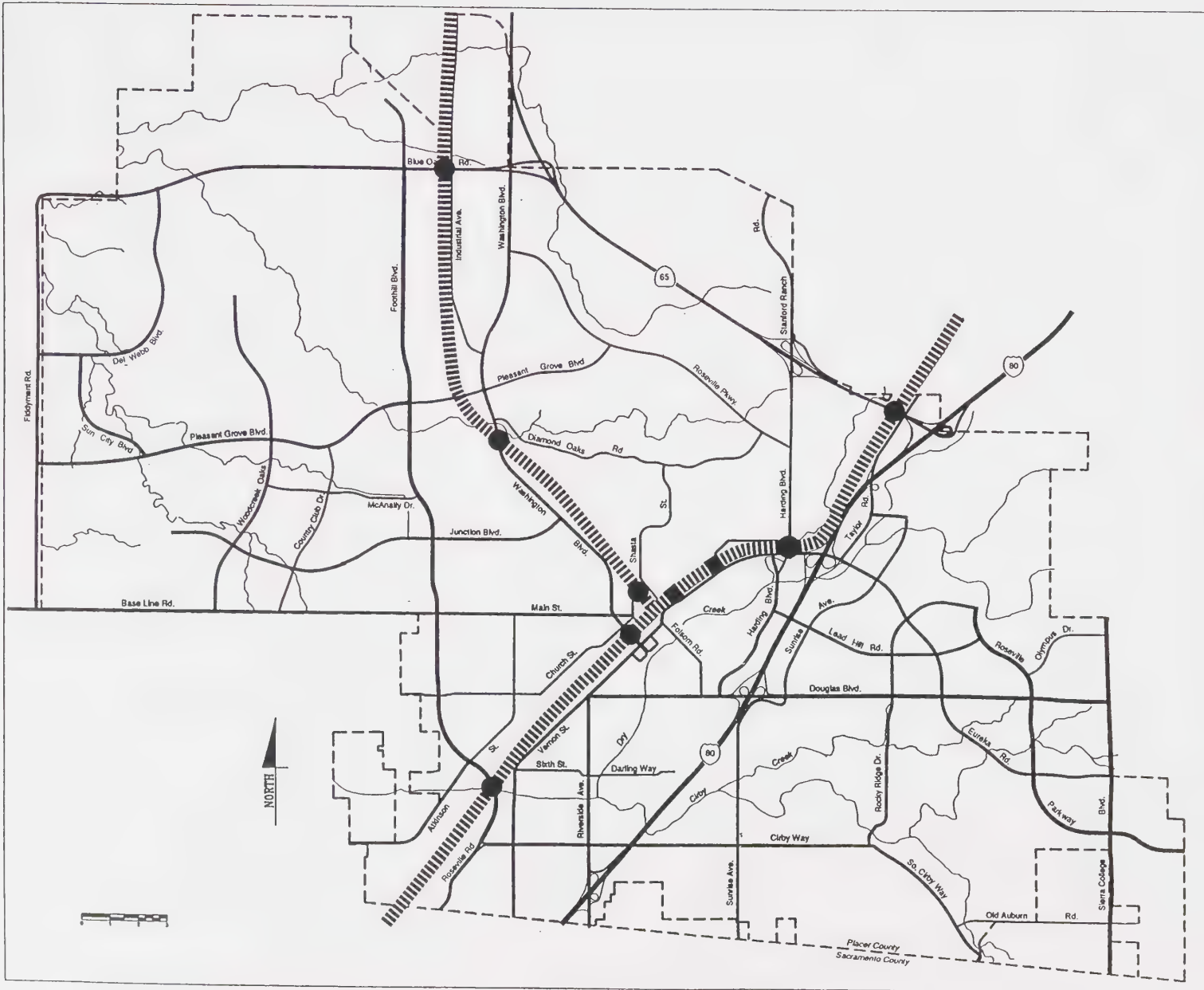


Figure 4.9-6  
Existing Railroad  
Facilities

North Roseville  
Specific Plan EIR

- ||||| Southern Pacific Transportation Company Mainline
- At-Grade Crossings
- Grade-Separated Crossings





## **Local Setting**

The Proposed Project site comprises 1,391.4 acres on four sites, or "neighborhoods." Neighborhood A in Phase I is bounded on the south by Blue Oaks Boulevard, on the north and west (partially) by the City limit and on the east by the future extension of Woodcreek Oaks Boulevard. Neighborhood B in Phase I is bounded on the north by Blue Oaks Boulevard, on the west by the Del Webb Specific Plan Area, on the south by the Northwest Roseville Specific Plan Area, and on the east by the Hewlett-Packard property. In Phase II, Neighborhood C is bounded by the Del Webb Specific Plan Area on the south, Phase I Neighborhood A on the east, the City limit on the north and Fiddymment Road on the West. Neighborhood D in Phase II is bounded by Baseline Road on the south, the Northwest Roseville Specific Plan Area on the east, Pleasant Grove Boulevard on the north and Fiddymment Road on the west. All four sites are currently undeveloped and do not generate traffic.

### **4.9.3 REGULATORY SETTING**

#### **Federal**

There are no known federal standards that would directly affect the transportation and circulation aspects of the Proposed Project.

#### **State**

The California Clean Air Act sets guidelines for air emissions resulting from vehicular travel. Traffic generated by the Proposed Project must not create air quality levels that exceed limits set by this act.

#### **Regional**

The County's Congestion Management Plan (CMP) sets standards for the reduction of vehicle trips in Placer County. Baseline Road, Foothills Boulevard, Cirby Way, and the existing portion of Blue Oaks Boulevard are part of the designated CMP roadway system. Other major arterials in the vicinity of the Proposed Project are not currently included on the Placer County CMP roadway system.

#### **Local Standards**

A number of City standards apply to the Proposed Project. These standards cover every aspect of the transportation system and must be satisfied in order for the project to be approved. These standards include:

Level of Service (LOS)<sup>1</sup> Standard. Under the General Plan, the City of Roseville has set a standard of LOS "C" or better for its roadway system during the p.m. peak hour. Consequently, LOS "A," "B," and "C" are considered acceptable, while "D," "E," and "F" are unacceptable. The General Plan policies, however, allow LOS "D" at locations within the City's infill area where the City decides, based on established criteria, that the necessary improvements are not worth the benefits of having LOS "C" for all hours of the day.

City of Roseville Improvement Standards. Roadway improvements within the City of Roseville must conform to a set of standard plans that detail City standards for pavement width, lighting, drainage, sewer, and other roadside facilities. Roadway facilities associated with the Proposed Project must meet or exceed these standards.

Capital Improvement Program (CIP). The CIP defines phasing of roadway improvements that are needed to meet the City's LOS standards over a 20-year period. This program must be updated a minimum of every 5 years or with the approval of a significant development such as the Proposed Project. The City's CIP is currently being updated and is expected to be completed in 1997.

Long Range Transit Master Plan. The City has developed a plan to guide development of both inter- and intra-city transit service through year 2010. The plan was based on the existing General Plan and did not consider development of the Proposed Project.

Bikeway Master Plan. The General Plan calls for the development of a comprehensive bikeway system that would provide connections between the City's major employment and housing areas and between existing and planned bikeways. The City recently adopted a Bikeway Master Plan which provides guidelines for the development of a city-wide network of bicycle facilities and design standards (based on Caltrans standards) for new bicycle facilities in Roseville.

Truck Routes. A number of roadways through the City of Roseville have been designated as truck routes. Of these routes, SR65 provides access to the vicinity of the Proposed Project. Improvements made to these roadways to accommodate the Proposed Project must consider their truck route designation.

Transportation System Management (TSM). TSM measures are designed to reduce vehicular travel demand and meet air quality goals. Employers of 50 or more employees within the City of Roseville are required to comply with the City's TSM ordinance and include TSM measures where feasible.

#### **4.9.4 IMPACTS**

In order to provide a more conservative (i.e., worst case) impact analysis, the following discussion uses 2010 market conditions as the baseline scenario to which the Proposed Project is added. Traffic impacts of the Proposed Project are based on a comparison to the traffic impacts from a future scenario of growth under the existing General Plan: the Future Baseline Condition (No Project Alternative) which is based on the 2010 Market scenario of the existing General Plan.

##### **Method of Analysis**

This analysis assumes that the impacts of the NRSP are fully additive, as though no development would occur in the Plan Area without the NRSP. It should be noted that two of the properties in Phase I, Diamond Creek and Mourier 140, have existing light industrial land use and zoning entitlements. Because the impact analysis does not "net out" development of these light industrial designations, it can be considered a "worst-case" analysis. That is, if the Proposed Project were



compared to developing the Plan Area under existing entitlements, rather than zero development in the Plan Area, the impacts would be less severe than those identified below.

The Proposed Project is a large, mixed-use development that could take many years to build out. Also, travel patterns from the Proposed Project would vary depending on development assumptions in the remainder of Roseville, and the rest of the Sacramento region. For these reasons, traffic impacts from the Proposed Project have **also** been compared to existing traffic conditions to provide an additional benchmark. A discussion of the relative impacts of the Proposed Project on existing conditions is included in Appendix D.

The development of transportation system needs and impacts is based on the travel demand model, which was originally developed by DKS Associates in 1992 for the City of Roseville and Placer County, and has since been updated and recalibrated. The model translates land uses into transit patronage and roadway volume projections. Its inputs are estimates of development (i.e., the number of single-family and multi-family dwelling units, and the amount of square footage of various categories of non-residential uses) and descriptions of the roadway and transit systems. The model covers not only the City of Roseville, but also the entire Sacramento region (including the portions of Placer County west of Colfax) and is consistent with the regional model that has been used by the Placer County Transportation Planning Agency (PCTPA) to prepare the Placer County Congestion Management Program (CMP) and Regional Transportation Plan (RTP). The model also maintains a general consistency with the trip distribution and mode choice estimates from the regional model used by the Sacramento Area Council of Governments (SACOG) to prepare the 1993 Metropolitan Transportation Plan (MTP).

The outputs of the travel demand model include average daily and peak hour traffic volume forecasts on roadway segments as well as for turning movements at intersections. The level of service of Roseville's arterial and collector roadway system is primarily dictated by the capacity and operations of its signalized intersections. For this EIR, levels of service were evaluated at 67 existing and 6 future signalized intersections throughout the City, using intersection geometrics identified in the City's 2010 CIP.

### **Development Assumptions Within Roseville**

The Circulation Element of the City's General Plan is intended to accommodate Roseville's anticipated population and employment growth through the year 2010 based on the 2010 Market scenario described in the General Plan Update EIR. The General Plan Update EIR also described a 2010 Market/Specific Plan Buildout scenario. The development assumptions under the existing General Plan for the 2010 Market scenario have been subsequently revised and used to define the future baseline condition (also known as the No Project Alternative). The development assumptions under the existing General Plan for the 2010 Market/Specific Plan Buildout scenario were used to define the cumulative condition (see Section 5.2).

Analysis of the 2010 Market scenario in the General Plan Update EIR identified a number of existing roadways that would require widening or extension in order to maintain a level of service "C" standard under 2010 Market development levels. In addition, several intersection improvements were

identified. These roadway and intersection improvements are summarized in Table 4.9-4. Subsequent to the General Plan Update EIR, the development assumptions for the 2010 Market scenario have been amended several times. The first amendment was a result of the Del Webb Specific Plan EIR, which revised the development levels associated with the 2010 Market scenario to include land uses associated with the Del Webb Specific Plan. The second amendment involved revised assumptions related to the mix of retail and office land uses on both business-professional and commercial parcels in the specific plan areas of the city. The third revision was a result of both the Hewlett-Packard Master Plan EIR and the NEC M-2 Line Expansion EIR. These revised land uses were analyzed using the same roadway network identified in the General Plan for the 2010 Market scenario and additional roadway and intersection improvements were identified. These improvements are also included in Table 4.9-4. The proposed Highland Reserve North Specific Plan, which is under review as of the publication of this document, would also require several roadway and intersection improvements to mitigate potential impacts.<sup>2</sup> These are shown in Table 4.9-4, as well.

### **Development Assumptions Outside of Roseville**

Development assumptions outside the City of Roseville, particularly in adjacent communities, also have an important impact on the forecasts of travel patterns within the city. Outside of Placer County, the travel forecasts for the General Plan Update EIR used 2010 land use and trip generation estimates prepared by the Sacramento Area Council of Governments (SACOG) in 1991. These same 2010 estimates were used to estimate the impacts of the No Project Alternative and the Proposed Project in this EIR.

Within Placer County, the 2010 development and buildout estimates in Roseville's General Plan Update EIR were prepared by Angus McDonald and Associates (1992), including estimates of population, dwelling units, employment, and floor area (for non-residential development) in each city and community project area in Placer County. In preparing their countywide estimates, Angus McDonald and Associates evaluated forecasts of population and households by SACOG and the State Department of Finance. Their land use forecasts were subsequently used by the Placer County Transportation Planning Agency (PCTPA) to prepare Placer County's CMP and Regional Transportation Plan (RTP). These development assumptions in South Placer County are listed in Table 4.9-5.

The assumed residential growth in this EIR under the No Project Alternative for Placer County as a whole is essentially the same as the 2010 countywide forecasts used by the City of Rocklin to evaluate 2010 conditions for the recent update of their circulation element. The countywide employment estimates under the No Project Alternative are essentially the same as the 2010 forecasts used by the City of Rocklin, as well as Placer County's 2010 growth scenarios presented in the "Issues and Options Report" for their General Plan Update. The Placer County General Plan EIR did assume a more aggressive employment growth by 2010, but the EIR indicated that it may take longer than 2010 for this employment growth to occur.



TABLE 4.9-4

## REQUIRED ROADWAY IMPROVEMENTS UNDER THE 2010 MARKET SCENARIO

| Project                                                                    | 2010<br>Market in<br>General<br>Plan Area<br>(1991) | Del Webb<br>Specific<br>Plan EIR<br>(1993) | NEC M-2<br>Line<br>Expansion<br>EIR (1995) | Hewlett-<br>Packard<br>Master<br>Plan EIR<br>(1995) | Highland<br>Reserve<br>North<br>Specific<br>Plan (1996) | North<br>Roseville<br>Specific<br>Plan EIR<br>(1996) <sup>1</sup> |
|----------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|
| <b>Roadway Extensions</b>                                                  |                                                     |                                            |                                            |                                                     |                                                         |                                                                   |
| Blue Oaks Bl. (2 lanes) - Foothills to Fiddymont                           |                                                     | X                                          |                                            |                                                     |                                                         |                                                                   |
| Fairway Dr. (2 lanes) - Stanford Ranch Rd. to Blue Oaks Bl.                |                                                     |                                            |                                            |                                                     | X                                                       |                                                                   |
| Junction Bl. (2 lanes) - Woodcreek Oaks to Baseline                        |                                                     | X                                          |                                            |                                                     |                                                         |                                                                   |
| Pleasant Grove Bl. (4 lanes) - SR-65 to Rocklin City limits                | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Roseville Pkwy. (6 lanes) - Rocky Ridge to Sunrise                         | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Roseville Pkwy. (6 lanes) - Taylor to Harding                              | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Roseville Pkwy. (4 lanes) - Washington to Foothills                        | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Woodcreek Oaks Bl. (2 lanes) - north of Pleasant Grove to Blue Oaks        | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| <b>Roadway Widening</b>                                                    |                                                     |                                            |                                            |                                                     |                                                         |                                                                   |
| Atlantic St. to 4 lanes - Vernon to Harding                                | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Baseline Rd. to 4 lanes - City limits to Foothills                         | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Blue Oaks Bl. to 5 lanes - Industrial to Foothills                         |                                                     | X                                          |                                            | X                                                   |                                                         |                                                                   |
| Blue Oaks Bl. to 4 lanes - Foothills to Woodcreek Oaks                     |                                                     |                                            |                                            | X                                                   |                                                         |                                                                   |
| Blue Oaks Bl. to 6 lanes - HP Collector 'B' to Foothills                   |                                                     |                                            |                                            |                                                     |                                                         | X                                                                 |
| Cirby Way to 5/6 lanes - Foothills to Oak Ridge                            | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Eureka Bl. to 6 lanes - Douglas to Professional                            | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Foothills Bl. to 6 lanes - Cirby to Pleasant Grove                         | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Foothills Bl. to 6 lanes - Pleasant Grove Bl. to 500' north                |                                                     | X                                          |                                            |                                                     |                                                         |                                                                   |
| Foothills Bl. to 6 lanes - 500' n/o Pleasant Grove Bl. to HP South Gate    |                                                     |                                            |                                            | X                                                   |                                                         |                                                                   |
| Riverside Ave. to 6 lanes - Cirby to Orlando                               | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Rocky Ridge Dr. to 6 lanes - Professional to north of Target               | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Roseville Pkwy to 4 lanes - City limits to Sierra College                  | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Roseville Pkwy to 4 lanes - Pleasant Grove to Washington                   | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Roseville Pkwy to 5 lanes - 500' north of Pleasant Grove to Pleasant Grove |                                                     |                                            |                                            |                                                     | X                                                       |                                                                   |
| Roseville Rd. to 4 lanes - City limits to Cirby Way                        | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |
| Stanford Ranch Rd. to 4 lanes - Fairway to City limits                     | X                                                   |                                            |                                            |                                                     |                                                         |                                                                   |



TABLE 4.9-4

**REQUIRED ROADWAY IMPROVEMENTS UNDER THE 2010 MARKET SCENARIO**

| <b>Project</b>                                                                                                                               | <b>2010<br/>Market in<br/>General<br/>Plan Area<br/>(1991)</b> | <b>Del Webb<br/>Specific<br/>Plan EIR<br/>(1993)</b> | <b>NEC M-2<br/>Line<br/>Expansion<br/>EIR (1995)</b> | <b>Hewlett-<br/>Packard<br/>Master<br/>Plan EIR<br/>(1995)</b> | <b>Highland<br/>Reserve<br/>North<br/>Specific<br/>Plan (1996)</b> | <b>North<br/>Roseville<br/>Specific<br/>Plan EIR<br/>(1996)<sup>1</sup></b> |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Sierra College Bl. to 6 lanes - County line to north City limit                                                                              | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| S. Cirby Way to 4 lanes - Rocky Ridge to Old Auburn                                                                                          | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Sunrise Ave. to 6 lanes - County line to Madden                                                                                              | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Taylor Rd. to 4 lanes - I-80 to City limits                                                                                                  | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Washington Bl. to 4 lanes - Sawtell to Blue Oaks                                                                                             | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| <b>Add Turn Lanes</b>                                                                                                                        |                                                                |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Eureka Rd./Douglas Bl.                                                                                                                       | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Fiddymt/Baseline/Walerga                                                                                                                     |                                                                | X                                                    |                                                      |                                                                |                                                                    |                                                                             |
| Foothills Bl./Blue Oaks Bl.                                                                                                                  |                                                                |                                                      |                                                      |                                                                |                                                                    | X                                                                           |
| Foothills Bl./Main St.                                                                                                                       | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Foothills Bl./NEC M-2 Gate/HP South Gate                                                                                                     |                                                                |                                                      | X                                                    |                                                                |                                                                    |                                                                             |
| Foothills Bl./Pleasant Grove Bl.                                                                                                             | X                                                              |                                                      |                                                      | X                                                              |                                                                    |                                                                             |
| Harding Bl./Atlantic St.                                                                                                                     | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Riverside Ave./Cirby Way                                                                                                                     | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Rocky Ridge Dr./Cirby Way                                                                                                                    | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Roseville Rd./Cirby Way                                                                                                                      | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Santa Clara Dr./Douglas Bl.                                                                                                                  | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Sierra College Bl./Douglas Bl.                                                                                                               | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Sierra Gardens Dr./Douglas Bl.                                                                                                               | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Sunrise Bl./Douglas Bl.                                                                                                                      | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Taylor Rd./Eureka Rd.                                                                                                                        | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Vernon St./Cirby Way                                                                                                                         | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Washington Bl./Blue Oaks Bl.                                                                                                                 | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| <b>Grade Separation</b>                                                                                                                      |                                                                |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Harding Bl./Roseville Pkwy.                                                                                                                  | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Riverside Ave./Cirby Way                                                                                                                     | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Sunrise Ave./Douglas Bl.                                                                                                                     | X                                                              |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| <b>Unmitigated Intersections Operating at Level of Service D or E - within Roseville</b>                                                     |                                                                |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Sunrise/Cirby                                                                                                                                | E                                                              | E                                                    | E                                                    | E                                                              | D                                                                  | D                                                                           |
| <b>Unmitigated Intersections Operating at Level of Service D or E - outside Roseville</b>                                                    |                                                                |                                                      |                                                      |                                                                |                                                                    |                                                                             |
| Sierra College Bl./Douglas Bl.                                                                                                               | D                                                              | D                                                    | D                                                    | D                                                              | D                                                                  | D                                                                           |
| <sup>1</sup> These improvements required for the Full Project only; no improvements are needed for Phase I.<br>SOURCE: DKS Associates, 1996. |                                                                |                                                      |                                                      |                                                                |                                                                    |                                                                             |

**TABLE 4.9-5**

**2010 DEVELOPMENT ASSUMPTIONS IN SOUTH PLACER COUNTY  
OUTSIDE OF CITY OF ROSEVILLE**

| Area <sup>1</sup>          | Dwelling Units | Non-Residential Square Footage (1,000 sq.ft.) |              |              |
|----------------------------|----------------|-----------------------------------------------|--------------|--------------|
|                            |                | Retail                                        | Office       | Industrial   |
| Rocklin City               | 18,817         | 3,774                                         | 1,400        | 3,477        |
| Lincoln City               | 5,900          | 392                                           | 144          | 1,430        |
| Dry Creek/West Placer CPA  | 1,300          | 153                                           | 13           | 237          |
| Granite Bay CPA            | 8,600          | 723                                           | 157          | 130          |
| Sunset CPA                 | 0              | 52                                            | 26           | 3,850        |
| Placer Central/Placer West | 3,400          | 59                                            | 0            | 252          |
| <b>Total</b>               | <b>38,017</b>  | <b>5,153</b>                                  | <b>1,740</b> | <b>9,376</b> |

**Notes:**

1. Areas represent Sphere of Influence areas of Cities, Community Plan Areas (CPA) and the Placer Central/Placer West area of unincorporated South Placer County as defined in the Placer County General Plan Update.

SOURCE: DKS Associates, 1994.

The principal difference between the 2010 development forecasts prepared for recent updates of the general plans for Roseville, Rocklin and Placer County concerns how land use is allocated within Placer County. The EIRs on these updates all recognized that the supply of land for housing and, in particular, non-residential uses in South Placer County would greatly exceed the demand for these uses through the year 2010. With this ample supply, a range of alternative land use allocations could be prepared. The growth scenarios used in this EIR were prepared for the purpose of analyzing the North Roseville Specific Plan. They represent one possible and reasonable outcome for the amount and distribution of growth and development in Placer County. They are consistent with those used in Roseville's General Plan Update EIR, and those used by the Placer County Transportation Planning Agency to prepare the 1993 Regional Transportation Plan (RTP) and Congestion Management Plan (CMP).

To develop the land use assumptions for Rocklin under the No Project Alternative and the Proposed Project, this EIR used the 2010 development assumptions developed by the City of Rocklin in their recent Circulation Element Update.

### **Transportation System Assumptions Under Future Baseline (No Project)**

The transportation system assumed under the Future Baseline (No Project Alternative) is described in this section. The additional transportation system improvements assumed under the Proposed Project are described in the following section.

The Future Baseline, or "No Project" scenario is a 2010 Market scenario that includes land use and circulation system assumptions that are anticipated to occur by the year 2010 as shown in approved development plans. For the purposes of this analysis, the Future Baseline condition includes all assumptions contained in the 2010 Market scenario of the General Plan EIR (with subsequent revisions) and the following plans:

- Del Webb Specific Plan,
- NEC Facility Expansion,
- Hewlett-Packard Master Plan, and
- Highland Reserve North Specific Plan; Phase I for NRSP Phase I analysis, Full Project for NRSP Full Project analysis.

Outside the City of Roseville, the same transportation improvements used in the 2010 Market analysis for the Roseville General Plan Update EIR were assumed for the No Project Alternative. These included the extension of light rail to Roseville with a substantial "feeder" bus system to the light rail stations plus expansion of the Capitol Corridor intercity rail line to include service between Colfax and the Bay Area. The assumed roadway improvements are generally consistent with PCTPA's Regional Transportation Plan. That roadway system includes improvements to a number of major arterial roadways in South Placer County, and some improvements to the State's freeway system. It does not include collector and local roads, due to the relatively low volumes of regional traffic that would use these roads. It includes the widening of I-80 to include high occupancy vehicle (HOV) lanes between Sacramento and Rocklin, the widening of SR65 between Roseville and Lincoln and the SR65 Lincoln bypass. The extension of light rail from Antelope to Roseville and the widening of I-80 to accommodate HOV lanes represent "unfunded" improvements in the RTP; however, their inclusion is consistent with the assumptions used for the 2010 Market scenario in the General Plan Update EIR.

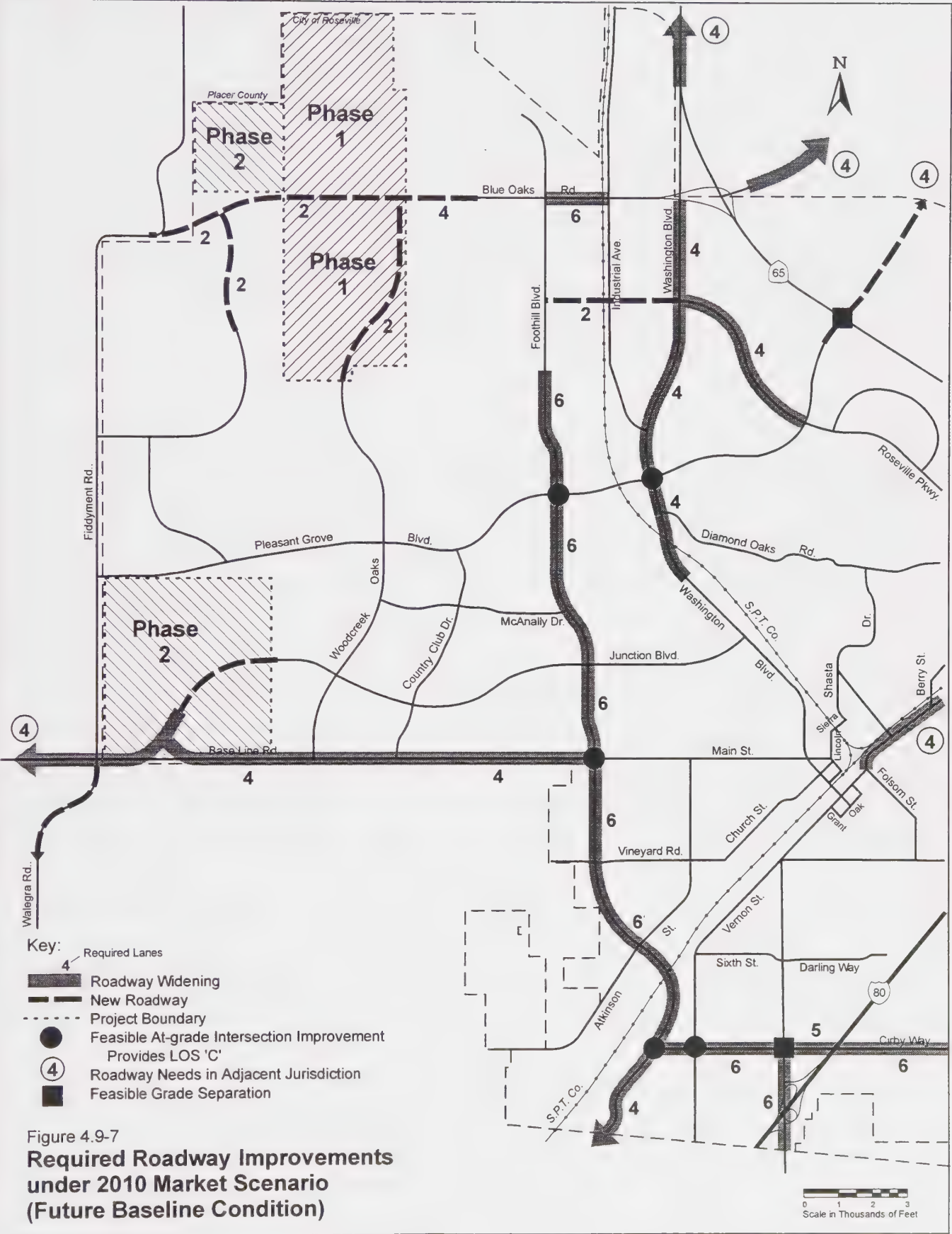
The light rail extension to Roseville from Antelope is estimated to cost about \$111 million to construct plus an additional \$3 million annually to operate. This extension was included by SACOG in their 1993 Metropolitan Transportation Plan (MTP) "even though Placer County officials haven't endorsed any new revenue-raising measures." SACOG further states in the MTP that "the Sacramento Regional Transit District has stated it could finance this project based on the expected funding generated for the District by the statewide and Sacramento County tax initiatives recommended in this plan."

Within the city, the roadway needs in the future baseline condition (No Project Alternative) are shown in Table 4.9-4 and Figure 4.9-7, Required Roadway Improvements Under 2010 Market Scenario. These needs reflect the City's 2010 CIP and were assumed to be fully implemented.

### **Impacts From Development of Existing General Plan (No Project)**

The following information is intended to summarize impacts associated with the development of land uses as allocated by the existing (pre-project) Roseville General Plan under the 2010 Market scenario and subsequent development plans. A discussion of the impacts (using the development and transportation assumptions outlined above) for this scenario is described below. This summary









information will be helpful to the reader when reviewing the following section on impacts associated with the Proposed Project, since the project impacts focus on the increment of growth between the future baseline condition (No Project Alternative) and the Proposed Project. Analysis of the 2010 Market scenario in the General Plan EIR identified a number of existing roadways that would require widening or extension in order to maintain a level of service "C" standard under 2010 Market development levels. In addition, a number of intersection improvements were identified. These roadway and intersection improvements are summarized in Table 4.9-4 and shown in Figure 4.9-7.

The Sunrise Avenue/Cirby Way intersection would operate at LOS "E" conditions with the maximum feasible at-grade improvements under the 2010 Market scenario. The City's level of service policy allows LOS "D" operations in Infill areas under certain conditions. Since other mitigation measures were determined to be infeasible, the General Plan EIR found that the LOS "E" condition at that intersection represents a significant and unavoidable impact of the 2010 Market scenario under the existing General Plan.

The analysis of the 2010 Market (No Project) scenario also indicates that the Douglas Boulevard/Sierra College Boulevard intersection would operate at LOS "D" conditions with the maximum feasible at-grade improvements. The City of Roseville only controls the western leg of this intersection. The remaining three legs are located in unincorporated Placer County. Placer County, which has assumed the same level of improvements for this intersection by 2010 in their recent General Plan Update, also has an LOS "C" standard for roadways not near State highways. Consequently, this represents a significant and unavoidable impact of the revised 2010 Market (No Project) scenario under the existing General Plan.

The analysis of the Del Webb, NEC, Hewlett Packard, and Highland Reserve North plans identified several impacts would require roadway or intersection improvements as mitigations. These improvements are shown in Table 4.9-4 and Figure 4.9-7. None of these plans resulted in significant and unavoidable impacts. The intersection of Foothills Boulevard at Pleasant Grove Boulevard would operate at LOS "D" under the Future Baseline condition, assuming the standard at-grade geometry. As a condition of approval for the Hewlett Packard Master Plan, the City Council approved addition of either a fourth southbound through lane or a third westbound left turn lane in order to provide LOS "C" or better at this intersection.

### **Transportation System Assumptions Under Proposed Project**

The roadway network shown in the Project Description (see Chapter 3) was assumed to be implemented consistent with the phasing of the Proposed Project. Concurrent with development of Phase I of the Proposed Project, it was assumed that Blue Oaks Boulevard will be three lanes and Woodcreek Oaks Boulevard would be two lanes in the project area, until traffic volumes justify widening both to four lanes. All other project roadways in Phases I and II will be constructed consistent with the cross sections shown in the Project Description. According to the current CIP, Fiddymment Road will be realigned north of Blue Oaks Boulevard. The connector roads linking Phase II of the Proposed Project will connect to Fiddymment Road in the area that may be affected by the realignment. Depending on which alignment is chosen, this connector road might need to extend into unincorporated Placer County.

## Trip Generation and Mode Choice of Proposed Project

The Proposed Project's trip generation was estimated using the trip generation rates that were used in developing Roseville's CIP, which are generally consistent with those in the Institute of Transportation Engineers' (ITE) publications on trip generation, as shown in Table 4.9-6. It should be noted that the number of dwelling units in Table 4.9-6 varies slightly from the Proposed Project, because traffic modelling was performed for an earlier version of the project. However, the difference is very slight (e.g., 4,835 conventional dwelling units compared to the Proposed Project's 4,698 conventional dwelling units, a difference of less than three percent). Further, because the traffic analysis assumed more dwelling units than currently proposed, the impacts in this section are slightly overstated. Therefore, the impacts of the Proposed Project would be identical to or slightly less severe than those described below.

| <b>TABLE 4.9-6</b><br><b>AVERAGE DAILY TRIP GENERATION</b><br><b>OF THE PROPOSED PROJECT<sup>1</sup></b>                                                                                                                                             |                         |                          |                        |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|------------------------|--------------------|
| <b>Land Use Category</b>                                                                                                                                                                                                                             | <b>Phase I Land Use</b> | <b>Phase II Land Use</b> | <b>Daily Trip Rate</b> | <b>Total Trips</b> |
| Residential:                                                                                                                                                                                                                                         |                         |                          |                        |                    |
| Single Family                                                                                                                                                                                                                                        | 1,771 du                | 1,950 du                 | 9.0 trips/du           | 33,489             |
| Multi-Family                                                                                                                                                                                                                                         | 478 du                  | 636 du                   | 6.5 trips/du           | 7,241              |
| Commercial                                                                                                                                                                                                                                           | 210 ksf                 | 26 ksf                   | 35.0 trips/ksf         | 8,276              |
| Business/Professional                                                                                                                                                                                                                                | 235 ksf                 | 54 ksf                   | 17.7 trips/ksf         | 5,114              |
| Park                                                                                                                                                                                                                                                 | 84 acres                | 29 acres                 | 2.2 trips/acre         | 249                |
| Schools:                                                                                                                                                                                                                                             |                         |                          |                        |                    |
| Elementary (K-6)                                                                                                                                                                                                                                     | 1,200 students          | 600 students             | 600 trips/school       | 1,800              |
| Intermediate (7-8)                                                                                                                                                                                                                                   | 700 students            | n/a                      | 700 trips/school       | 700                |
| Eskaton Village:                                                                                                                                                                                                                                     |                         |                          |                        |                    |
| Attached Units                                                                                                                                                                                                                                       | 400 du                  | n/a                      | 0.9 trips/du           | 356                |
| Assisted Living                                                                                                                                                                                                                                      | 200 du                  | n/a                      | 2.2 trips/du           | 430                |
| Skilled Nursing                                                                                                                                                                                                                                      | 100 beds                | n/a                      | 2.6 trips/bed          | 260                |
| Administration                                                                                                                                                                                                                                       | 13 ksf                  | n/a                      | 17.7 trips/ksf         | 230                |
| <b>Total Vehicle Trips Generated</b>                                                                                                                                                                                                                 |                         |                          |                        | <b>58,130</b>      |
| <sup>1</sup> As discussed in the Method of Analysis, the traffic analysis assumes more dwelling units than the Proposed Project, because traffic modeling was conducted for an earlier version of the project.<br>SOURCE: ITE, DKS Associates, 1996. |                         |                          |                        |                    |

The Proposed Project includes a variety of non-residential land uses. It was assumed that all commercial land uses of the Proposed Project would generate vehicle trips at the standard commercial trip rate assumed for Roseville's CIP, with the exception of the commercial land uses in Parcels DC-31 (in Phase I) and WW-40 (in Phase II) of the Proposed Project. Parcel DC-31 was



assumed to be 55 percent commercial and 45 percent business/professional uses, based on its land use description. Parcel WW-40 was assumed to be split 50/50 between commercial and business/professional. All commercial uses were assumed to have a Floor-Area-Ratio (FAR) of 0.20; business/professional uses were assumed to have an FAR of 0.30. These FARs are consistent with those used for Roseville's CIP.

The Proposed Project also includes a 3.6-acre site (Parcel WW-71) zoned for use by the Dry Creek Unified School District. The project description for this site includes a 15,000-square foot administrative office building which is assumed to generate vehicle trips at the same rate used for all other business/professional uses in the City (17.7 trips/ksf).

The ITE 5th edition Trip Generation Manual (1991) includes only limited data with regard to senior living facilities. It was therefore necessary to develop an estimate of trip generation for the Roseville Eskaton site by comparing ITE rates with data from a similar local area site. In this case, data from the Eskaton Village in Carmichael, California was used.

The data was collected in February and June of 1995 at the Carmichael site, which was composed of 234 occupied residential units, 36 assisted living apartments and 30 skilled nursing beds. The count data showed that this facility generated an average of approximately 350 daily vehicle trips.

The trip rates shown in the ITE 5th edition for Congregate Care Facilities (2.15 trips/unit) and Nursing Homes (2.60 trips/bed) were applied to the 36 Assisted Living Units and 30 Nursing Facility beds respectively. A daily trip rate of 0.89 trips per unit was calculated for the 234 Residential Units by assuming that the ITE p.m. peak hour rate of 0.08 trips/unit for Elderly Housing represented 10 percent of the total daily trips generated. Using these rates, the daily trip generation of the Carmichael facility was calculated to be 360 trips, which agreed very closely with the 1995 count data.

The Roseville site would contain 400 Residential units, 200 Assisted Living units, and 100 Nursing Facility beds, as well as a 13,000-square foot business office. The rates described above were then applied to the proposed Roseville Eskaton Village and an average daily trip generation of approximately 1,300 trips was calculated.

### **Standards of Significance**

The following criteria were used to determine the significance of transportation and circulation impacts.

- The Proposed Project would not meet the General Plan's level of service policy. The Proposed Project is considered to have a significant impact on those intersections that would operate at an acceptable level of service (LOS "C" or better) under the No Project Alternative, but would operate at LOS "D" or worse under the Proposed Project and thus require additional mitigation;

- If planned transit services do not meet the needs of the Proposed Project, which includes helping the City meet its level of service standard, transportation systems management standards and air quality goals; or
- If planned bicycle facilities do not meet the needs of the Proposed Project, and the policies and guidelines of the Bikeway Master Plan.

## PHASE I IMPACTS

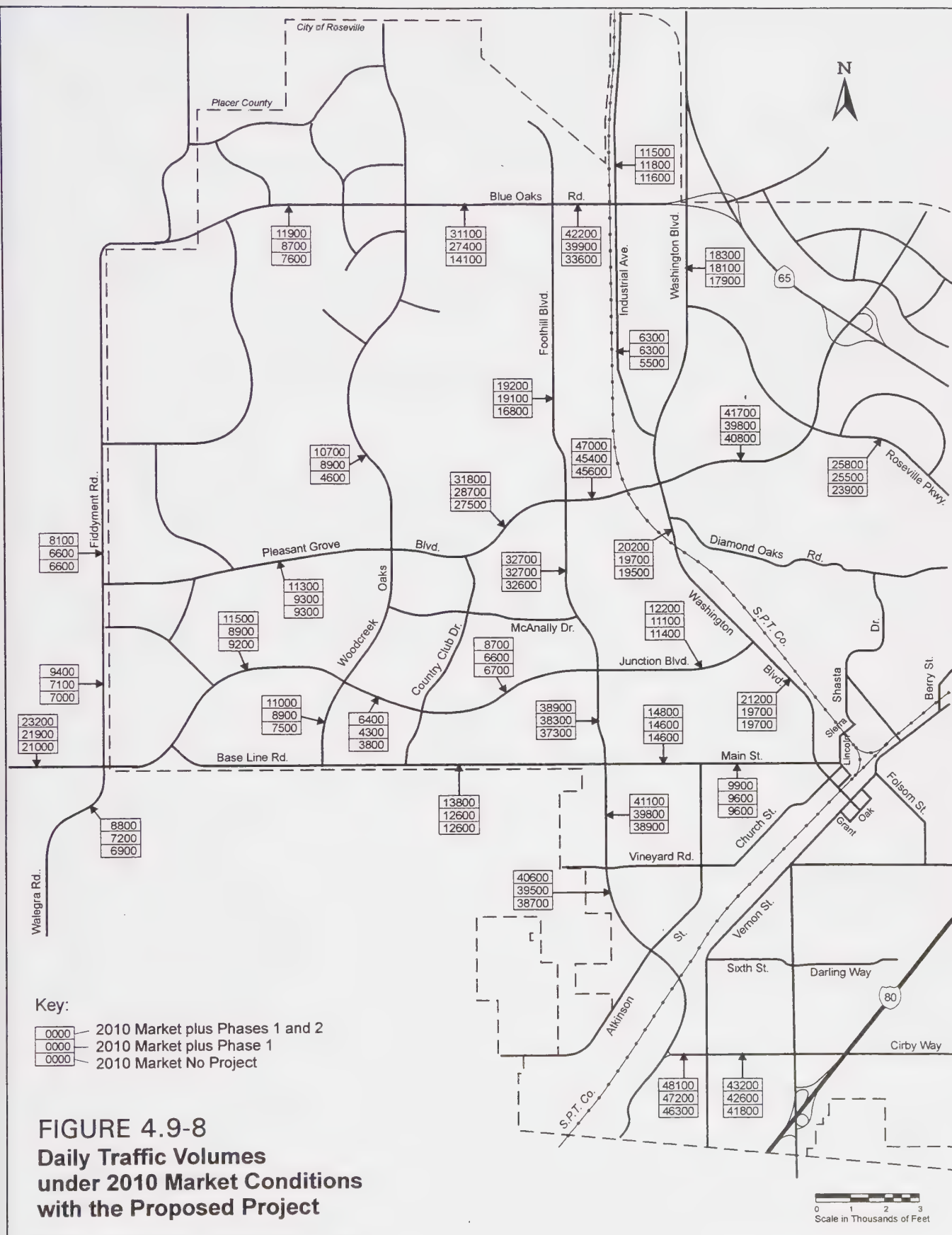
Peak hour traffic volumes were analyzed under 2010 Market conditions. Daily traffic volumes associated with this analysis are shown in Figure 4.9-8, Daily Traffic Volumes under 2010 Market Conditions with the Proposed Project. No trip generation was assumed for the project area at 2010 under No Project conditions, even though a portion of Phase I is zoned as Light Industrial. This was due to the absorption forecasts for the property of 2010. Therefore, the project under 2010 Market condition is additive.

|                         |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| <b>IMPACT 4.9-1(A):</b> | <b>Increased traffic volumes on City of Roseville roadways.</b> |
| <b>SIGNIFICANCE:</b>    | Less than significant                                           |
| <b>MITIGATION:</b>      | None required                                                   |

The development of Phase I of the Project would contribute an additional 34,000 daily trips to the northwestern area of the City, with these trips utilizing several modes of transportation (single- and multiple occupant automobiles, transit, non-motorized). These trips would distribute onto the roadway system via Blue Oak Boulevard (east and west of the Project) and Woodcreek Oaks Boulevard (south of the Project); some trips would remain internal to the Proposed Project.

An analysis of daily traffic volumes under 2010 Market conditions including Phase I of the Proposed Project indicates that daily traffic volumes would increase on Blue Oaks Boulevard between the Proposed Project and Foothills Boulevard (from 14,100 to 27,400) and on Blue Oaks Boulevard between Foothills Boulevard and SR-65 (from 33,600 to 39,900). Daily traffic volumes on Woodcreek Oaks Boulevard between the Proposed Project and Pleasant Grove Boulevard would also increase (from 4,600 to 9,600). Several other roadways in the immediate vicinity of the Proposed Project would experience lesser increases in daily traffic volumes (See Figure 4.9-8).

The roadway system assumed under the current 2010 CIP is designed to provide sufficient capacity to allow the transportation system to operate at LOS "C" or better. In some cases, roadway widening project meant to provide LOS "C" conditions will also provide capacity for additional traffic volumes. The additional traffic generated by the Proposed Project could be added to the 2010 CIP roadway network and would not cause any roadway segment to operate at LOS "D" or worse. Therefore, the increased traffic volumes represent a less-than-significant impact.







|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>IMPACT 4.9-2(A):</b>       | <b>Increased demand for transit service (both bus and light rail).</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                            |
| <b>MITIGATION:</b>            | Mitigation Measure 4.9-1 (Update Long-Range Transit Master Plan)       |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                  |

The City has limited transit services. As discussed earlier in this section under Method of Analysis, the travel demand forecasts in the General Plan Update EIR included extension of light rail transit to Roseville, as well as a substantial increase in the local bus system within the City. The bus system assumed for that analysis was the same as that used by Sacramento Regional Transit for its long-range Systems Planning Study. In 1992, a Long-Range Transit Master Plan was developed for the City to guide the development of intra-city and inter-city transit service through the year 2010. This plan did not consider bus service to the Proposed Project.

The most likely demand for transit service from the Proposed Project would be in the form of persons who rely on transit as their primary mode of transportation, including the disabled and the elderly. Eskaton Village would provide van and bus service to its residents for the purpose of shopping, recreation and medical trips. Some vans would be wheelchair accessible.

Any employers within the Proposed Project with more than 50 employees would be subject to the City's transportation systems management (TSM) standards and required to promote alternative modes of transportation (such as transit) in order to reduce the number of vehicle trips generated by their business.

Improvements to the City's transit service would be needed to help achieve its roadway level of service standard and TSM standards, as well as the trip reduction standards in both the Placer County Congestion Management Plan and the Placer County Air Quality Attainment Plan to achieve air quality goals. More importantly, transit service provides mobility to transit dependent persons, especially the disabled and the elderly.

Providing transit service to the Proposed Project would require the extension of existing transit routes and service areas of demand-responsive services, or the establishment of new routes that would provide regular, daily service to the Proposed Project. However, the Long Range Transit Master Plan does not include transit service to the Proposed Project, and, capital and operating funding sources for major expansions in transit services have not been identified. For this reason, the evaluation of the Proposed Project did not include increases in transit service beyond those included in the No Project Alternative.

Adequate right of way width for future light rail transit has been provided along Roseville Parkway northwest of Harding Boulevard to Foothills Boulevard. This potential long-range rail extension would provide access to the Proposed Project via feeder buses or park-and-ride facilities. However, such an extension must be considered a "post-2010" improvement, since funding has not been identified.

More realistically, bus service could be provided to the Proposed Project along Pleasant Grove Boulevard, Woodcreek Oaks Boulevard, Fiddymment Road and/or Blue Oaks Boulevard. Roseville fixed-route could provide regularly scheduled, fixed-route service and RADAR could provide on-call service to not only the Proposed Project, but also the Del Webb and Northwest Roseville Specific Plans and the Hewlett-Packard Master Plan.

The Proposed Project includes the construction of bus turnouts to accommodate anticipated bus service. The Proposed Project does not propose having transit service expanded to the Plan Area and it is unlikely that such an expansion will occur by the year 2010, or until a funding source is identified.

The City's Long-Range Transit Master Plan should be updated not only to include bus service to the Proposed Project, but also to identify a funding source to which the Proposed Project and other areas served by transit can contribute their fair share towards the capital and operating expenses. The expansion of transit service to the Proposed Project would reduce this impact to less-than-significant levels.

|                         |                                                             |
|-------------------------|-------------------------------------------------------------|
| <b>IMPACT 4.9-3(A):</b> | <b>Increased demand for bicycle circulation facilities.</b> |
| <b>SIGNIFICANCE:</b>    | Less than significant                                       |
| <b>MITIGATION:</b>      | None required                                               |

The City's Bicycle Master Plan specifies that Class II bike lanes would be included on several arterials in the vicinity of the Plan Area, including:

- Woodcreek Oaks Boulevard,
- Blue Oaks Boulevard,
- Pleasant Grove Boulevard,
- Junction Boulevard, and
- Fiddymment Road.

Additionally, a Class I bike path is planned to run along Pleasant Grove Creek, which crosses both phases of the Plan Area. The NRSP also identifies Junction Boulevard, Baseline Road and Foothills Boulevard as bicycle commuter routes. The Proposed Project could result in a substantial demand for safe and convenient pedestrian/bicycle facilities by residents and employees of the Plan Area for primarily transportation-related purposes. According to the NRSP a pedestrian and bikeway system would be incorporated that would allow travel throughout the Plan Area and provide linkage to the City's planned bikeway system. The NRSP includes cross sections depicting Class II bike lanes on Woodcreek Oaks Boulevard and Blue Oaks Boulevard.

The Applicant has included a network of bicycle facilities to accommodate travel through the Plan Area and provide linkage to the City's proposed bikeway system. No further improvements are required in order to satisfy the General Plan's policies regarding bicycle transportation; however, the Bicycle Master Plan (BMP) should be updated to reflect proposed bicycle facilities. The Applicant would be required to participate in the BMP Update. The expanded bikeway system links to the existing and planned system would reduce this impact to a less-than-significant level.



**IMPACT 4.9-4(A):****Increased traffic volumes on Placer County roadways.****SIGNIFICANCE:**

Less than significant

**MITIGATION:**

None required

Per the Memorandum of Understanding (MOU) between the City of Roseville and Placer County, Phase 1 of the Proposed Project was analyzed using the model and assumptions of the Placer County General Plan Update EIR<sup>3</sup>. In the General Plan, Placer County assumed that there would be 2,325 dwelling units in the year 2010 in the portion of the City that encompasses the Proposed Project. These units were replaced with the land use and circulation system associated with the Proposed Project. For analysis of Phase I, 768 dwelling units assumed in the Placer County General Plan were replaced with Phase I land use (see Table 4.9-6). The remaining 1,557 units assumed in the Placer County General Plan were not removed because they were allocated to the portion of the City that encompasses Phase II of the Proposed Project.

A level of service analysis was conducted to determine the change in daily traffic volumes that would be created by the Proposed Project and whether or not these changes would cause any County roadway segment to operate at LOS "D" or worse conditions that would operate at LOS "C" or better under the original assumptions of the Placer County General Plan. Table 4.9-7 compares the daily traffic volumes and levels of service of key roadway segments in Placer County in the vicinity of the Proposed Project. The increased traffic volumes resulting from development of Phase I of the Proposed Project would not result in LOS "D" or worse conditions on any County roadway in the vicinity of the Proposed Project; therefore, this impact is considered less than significant.

**TABLE 4.9-7**

**NORTH ROSEVILLE SPECIFIC PLAN  
AVERAGE DAILY TRAFFIC VOLUMES AND  
LEVELS OF SERVICE ON PLACER COUNTY ROADWAYS  
(2010 MARKET CONDITIONS)**

| Roadway            | Location            | No Project |     | Proposed Project |     | Proposed Project |     |
|--------------------|---------------------|------------|-----|------------------|-----|------------------|-----|
|                    |                     |            |     | Phase I          |     | Phases I and II  |     |
|                    |                     | ADT        | LOS | ADT              | LOS | ADT              | LOS |
| Baseline Road      | w/o Fiddymment Road | 36,400     | B   | 34,400           | B   | 35,400           | B   |
| Fiddymment Road    | n/o Baseline Road   | 12,000     | A   | 9,000            | A   | 10,000           | A   |
| Fiddymment Road    | n/o Blue Oaks       | 4,000      | A   | 3,000            | A   | 4,000            | A   |
| Foothill Boulevard | n/o Blue Oaks       | 7,000      | A   | 9,000            | A   | 9,000            | A   |
| Industrial Avenue  | n/o Blue Oaks       | 10,000     | A   | 11,000           | A   | 12,000           | A   |

SOURCE: DKS Associates, 1997.

**IMPACT 4.9-5(A):****Increased traffic volumes on City of Rocklin roadways.****SIGNIFICANCE:**

Less than significant

**MITIGATION:**

None required

As shown in Table 4.9-8, the additional traffic volumes generated by Phase I of the Proposed Project would increase daily traffic volumes on Sunset Boulevard between SR65 and Stanford Ranch Road by approximately 1,000 vehicles per day and on Stanford Ranch Road between SR65 and Sunset Boulevard by approximately 500 vehicles per day. An analysis of key intersections along these roadways during the p.m. peak hour indicated that the additional traffic generated by Phase I of the Proposed Project would not result in Level of Service "D" or worse conditions at any of Rocklin's major intersections. Therefore, the additional traffic volumes on City of Rocklin roadways as a result of the Proposed Project is considered a less-than-significant impact.

**TABLE 4.9-8**

**NORTH ROSEVILLE SPECIFIC PLAN  
AVERAGE DAILY TRAFFIC VOLUMES ON CITY OF ROCKLIN ROADWAYS  
(2010 MARKET)**

| <b>Roadway</b>      | <b>Location</b> | <b>No Project</b> | <b>Proposed Project (Phase I)</b> | <b>Proposed Project (Phases I and II)</b> |
|---------------------|-----------------|-------------------|-----------------------------------|-------------------------------------------|
| Sunset Blvd.        | e/o SR 65       | 13,200            | 13,300                            | 13,200                                    |
|                     | e/o Blue Oaks   | 18,500            | 19,600                            | 19,200                                    |
|                     | e/o Park        | 24,100            | 24,500                            | 24,400                                    |
| Stanford Ranch Road | n/o SR 65       | 48,500            | 48,500                            | 48,800                                    |
|                     | n/o Fairway     | 25,400            | 25,900                            | 25,200                                    |
|                     | s/o Sunset      | 29,000            | 29,500                            | 29,100                                    |

SOURCE: DKS Associates, 1997.

**IMPACT 4.9-6(A):****Increased traffic volumes on Sutter County roadways.****SIGNIFICANCE:**

Less than significant

**MITIGATION:**

None required

Using roadway network and land use assumptions consistent with the Placer County General Plan and including Phase I of the Proposed Project, the additional traffic volumes generated by Phase I of the Proposed Project under 2010 Market conditions were analyzed to determine increased daily traffic volumes on Placer County roadways entering Sutter County (see Table 4.9-9). It was determined that daily traffic volumes on Baseline Road at the Placer/Sutter County line would increase by roughly 200 vehicles per day (from 26,200 to 26,400). Daily traffic volumes on Sunset West Boulevard (which becomes Howsley Road upon entering Sutter County) and Catlett Road

would experience increases of less than 100 daily vehicle trips. In the Placer County 2010 CIP, Baseline Road has been programmed to be widened to four lanes, which would provide level of service "C" or better under 2010 Market conditions, including Phase I of the Proposed Project. Therefore, the increase traffic volumes generated by Phase I represent a less-than-significant impact.

### FULL PROJECT

Development of Phase II of the Proposed Project would result in additional impacts related to vehicular travel beyond those described above for Phase I. These impacts would occur as a result in the further increase in the number of vehicle trips generated by the Proposed Project and additional demand for transit service and bicycle facilities.

**TABLE 4.9-9**

**NORTH ROSEVILLE SPECIFIC PLAN  
AVERAGE DAILY TRAFFIC VOLUMES ON  
ROADWAYS CROSSING PLACER/SUTTER COUNTY LINE**

| Roadway                       | No Project |     | Proposed Project |     | Proposed Project |     |
|-------------------------------|------------|-----|------------------|-----|------------------|-----|
|                               |            |     | Phase I          |     | Phases II        |     |
|                               | ADT        | LOS | ADT              | LOS | ADT              | LOS |
| Baseline Road                 | 15,000     | C   | 15,400           | C   | 15,800           | C   |
| Sunset West/Howsley Road      | 3,200      | A   | 3,300            | A   | 2,800            | A   |
| Catlett Road                  | 500        | A   | 500              | A   | 700              | A   |
| SOURCE: DKS Associates, 1997. |            |     |                  |     |                  |     |

**IMPACT 4.9-1(B):**

**Increased traffic volumes on City of Roseville roadways.**

**SIGNIFICANCE:**

Significant

**MITIGATION:**

Mitigation Measure 4.9-2 (Amend the transportation CIP to provide roadway improvements)

**RESIDUAL SIGNIFICANCE:**

Less than significant

The reader is referred to the discussion under Impact 4.9-1(A). An analysis of daily traffic volumes under 2010 Market conditions including Phases I and II of the Proposed Project indicates that the additional traffic generated by Phase II would be greatest on Blue Oaks Boulevard, Fiddymment Road and Woodcreek Oaks Boulevard. Several other roadways in the immediate vicinity of the Proposed Project would experience smaller increases in daily traffic volumes (see Figure 4.9-8).



Analysis of daily traffic volumes under 2010 Market conditions without the Proposed Project (the No Project Alternative) determined that one roadway segment and one intersection would operate at unacceptable service levels as a result of the Full Project. Blue Oaks Boulevard between Foothills Boulevard and Woodcreek Oaks Boulevard would operate at an acceptable level of service with the improvements included in the current transportation CIP and including mitigation measures from subsequent EIRs (two lanes per direction). With the addition of the Full Project, (Phases I and II) traffic volumes would cause the level of service on this roadway segment to operate at LOS "D" or worse during several hours of the day. The addition of a third through lane on Blue Oaks Boulevard between Foothills Boulevard and Hewlett Packard's proposed Collector "B" to those improvements included in the transportation CIP would provide adequate capacity, and reduce this impact to a less-than-significant level.

Analysis of the level of service at the intersection of Foothills and Blue Oaks Boulevards under 2010 Market conditions without the project (the No Project Alternative) determined that it would operate at LOS "B" with the improvements included in the current transportation CIP. With the addition of the Full Project, resulting traffic volumes would cause the level of service at this intersection to decrease to LOS "D" during the p.m. peak hour. The addition of a second northbound left turn lane on Foothills Boulevard to those improvements included in the transportation CIP would provide LOS "C" during the p.m. peak hour, and reduce this impact to a less-than-significant level.

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>IMPACT 4.9-2(B):</b>       | <b>Increased demand for transit service (both bus and light rail).</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                            |
| <b>MITIGATION:</b>            | Mitigation Measure 4.9-1 (Update Long-Range Transit Master Plan)       |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                  |

The reader is referred to the discussion of Impact 4.9-2(A) for a discussion of Phase I transit needs. The development of the Full Project would create an additional demand for transit service to the Plan Area. The establishment of fixed-route bus service along Junction Boulevard, Baseline Road, Blue Oaks Boulevard or Pleasant Grove Boulevard would serve residents and employees in Phase II. The Long-Range Transit Master Plan should be updated to reflect the need for transit service to the Full Project. The extension of transit service to the Proposed Project would reduce this impact to less than significant levels.

|                         |                                                             |
|-------------------------|-------------------------------------------------------------|
| <b>IMPACT 4.9-3(B):</b> | <b>Increased demand for bicycle circulation facilities.</b> |
| <b>SIGNIFICANCE:</b>    | Less than significant                                       |
| <b>MITIGATION:</b>      | None required                                               |

The reader is referred to the discussion of Impact 4.9-3(A). The development of the Full Project would create additional demand for bicycle facilities beyond those described under Phase I. The NRSP includes a pedestrian and bikeway system to serve residents and employees of Phase II. This system would be linked with the planned bikeway systems of Phase I and to the City's planned

bikeway system. The City's Bicycle Master Plan should be updated to reflect proposed bicycle facilities, in which the Applicant would be required to participate. The proposed bicycle facilities would reduce this impact to less-than-significant levels.

|                         |                                                             |
|-------------------------|-------------------------------------------------------------|
| <b>IMPACT 4.9-4(B):</b> | <b>Increased traffic volumes on Placer County roadways.</b> |
| <b>SIGNIFICANCE:</b>    | Less than significant                                       |
| <b>MITIGATION:</b>      | None required                                               |

The reader is referred to the discussion of Impact 4.9-3(A). Under analysis of the Full Project, all 2, 325 dwelling units that had been assumed in the Placer General Plan were replaced by the land uses of the Full Project (see Table 4.9-6). As shown in Table 4.9-7, the increased traffic volumes resulting from development of the Full Project would not result in LOS "D" or worse conditions on any County roadways in the vicinity of the project; therefore, this impact is considered less than significant.

|                         |                                                               |
|-------------------------|---------------------------------------------------------------|
| <b>IMPACT 4.9-5(B):</b> | <b>Increased traffic volumes on City of Rocklin roadways.</b> |
| <b>SIGNIFICANCE:</b>    | Less than significant                                         |
| <b>MITIGATION:</b>      | None required                                                 |

The reader is referred to the discussion of Impact 4.9-4(A). As shown in Table 4.9-8, the additional traffic volumes generated by the Full Project would not result in substantial increases in daily traffic volumes on City of Rocklin roadways, so this is considered a less-than-significant impact.

|                         |                                                             |
|-------------------------|-------------------------------------------------------------|
| <b>IMPACT 4.9-6(B):</b> | <b>Increased traffic volumes on Sutter County roadways.</b> |
| <b>SIGNIFICANCE:</b>    | Less than significant                                       |
| <b>MITIGATION:</b>      | None required                                               |

The reader is referred to the discussion under Impact 4.9-6(A). It was determined that daily traffic volumes on Baseline Road at the Placer/Sutter County line would increase by roughly 600 vehicles per day (from 26,200 to 26,800) under 2010 Market conditions that included both phases of the Proposed Project, of which 400 vehicles could be directly attributed to Phase II of the Proposed Project. Daily traffic volumes on Sunset West Boulevard (which becomes Howley Road upon entering Sutter County) and Catlett Road would experience increases of less than 100 daily vehicle trips. In the Placer County 2010 CIP, Baseline Road has been programmed to be widened to four lanes, which would provide level of service "C" or better under 2010 Market conditions that included Phases I and II of the Proposed Project. Therefore, the increase traffic volumes generated by the Full Project represent a less-than-significant impact.

## 4.9.5 MITIGATION MEASURES

### INCREASED DEMAND FOR TRANSIT SERVICE

#### **Mitigation Measure 4.9-1: Update Long-Range Transit Master Plan.**

Mitigation Measure 4.9-1 applies to Impact 4.9-2 (A) and (B).

Development of Phase I and the Full Project would generate demand (though probably low) for transit service. Existing service should be extended or new service provided to the Proposed Project, and should be included as part of the Long Range Transit Master Plan and should be consistent with the applicable General Plan transit policies in the Circulation Element.

### INCREASED TRAFFIC VOLUMES

#### **Mitigation Measure 4.9-2: Amend the CIP to provide roadway improvements.**

Mitigation Measure 4.9-2 applies to Impact 4.9-1 (B) only.

The following improvements shall be added to the CIP, and the Applicant shall provide fair share funding toward these improvements.

*Add a third through lane in both directions of Blue Oaks Boulevard from Foothills Boulevard to H.P.'s Collector "B."*

This measure is required for the Full Project only. Amend the current CIP to include the addition of a third through lane in both directions of Blue Oaks Boulevard from Foothills Boulevard to H.P.'s Collector "B." This improvement will provide LOS "C" or better conditions for the Full Project.

*Add a second northbound left turn lane to the intersection of Foothills Boulevard and Blue Oaks Boulevard.*

Amend the current CIP to include the addition of a second northbound left turn lane to Foothills Boulevard at its intersection with Blue Oaks Boulevard. This improvement will provide LOS "C" or better conditions under the Full Project.



**TABLE 4.9-10****TRAFFIC AND CIRCULATION RESIDUAL IMPACT SUMMARY TABLE**

| <b>Impact</b>                                                                         | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
|---------------------------------------------------------------------------------------|------------------------|-----------------------------|
| Impact 4.9-1(A and B) Increased traffic volumes on City of Roseville roadways.        | Less than significant  | Less than significant       |
| Impact 4.9-2(A and B) Increased demand for transit service (both bus and light rail). | Less than significant  | Less than significant       |
| Impact 4.9-3(A and B) Increased demand for bicycle circulation facilities.            | Less than significant  | Less than significant       |
| Impact 4.9-4(A and B) Increased traffic volumes on Placer County roadways.            | Less than significant  | Less than significant       |
| Impact 4.9-5(A and B) Increased traffic volumes on City of Rocklin roadways.          | Less than significant  | Less than significant       |
| Impact 4.9-6(A and B) Increase traffic volumes on Sutter County roadways.             | Less than significant  | Less than significant       |

## ENDNOTES

1. Level of service (LOS) is a qualitative measure of the effect of a number of factors which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience. Levels of service are designated “A” through “F” from the best to worst, which covers the entire range of traffic operations that might occur. LOS “E” describes conditions approaching and at maximum capacity.
2. *Highland Reserve North Specific Plan Draft EIR*, November 1996.
3. The Memorandum of Understanding (MOU) between the City and Placer County indicates that the City is required to analyze p.m. peak hour levels of service for County intersections. Discussions with County staff confirm that the County typically conducts p.m. peak hour analysis only when analyzing the potential impacts of a County project on a Rosevill intersection. County staff has determined that no p.m. peak hour analysis is required to satisfy the MOU's requirements.

---

---

#### ***4.10 AIR QUALITY***

---

---





---

---

## ***4.10 AIR QUALITY***

---

---

### **4.10.1 INTRODUCTION**

This section evaluates the potential impacts on air quality resulting from the implementation of either Phase I or Phases I and II of the proposed NRSP. Where appropriate, mitigation measures are suggested that would minimize or eliminate potential significant air quality impacts. Supplemental technical information concerning air pollutant monitoring data and modeling assumptions are provided in Appendix G of this document. In order to provide the most conservative analysis ("worst case"), the year 2010 was used as the baseline.

### **4.10.2 ENVIRONMENTAL SETTING**

Ambient air quality is commonly determined by climatological conditions, the area's topography, and the quantity and type of pollutants released. The Roseville area is subject to a combination of topographical and climatic factors that create the potential for increases in regional and local air pollutants. The following section describes pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant buildup and dispersion in Roseville. The environmental setting also discusses the sources, types, and health effects of air pollutants.

#### **Climate and Topography**

The Plan Area is located in the Sacramento Valley Air Basin (SVAB), within western Placer County. Weather patterns throughout the SVAB, including Roseville, are affected by geography. Mountain ranges tend to buffer the SVAB from the marine weather systems that originate over the Pacific and are drawn inland by the jet stream. The SVAB, which extends from south of Sacramento to north of Redding, is bounded by the Sierra Nevada on the east, the Coast Range on the west, and the Cascade Range on the north. The only westerly breach in this barrier is the Carquinez Strait which exposes the midsection of the Valley to the Pacific Coast marine weather regime. Western Placer County is noticeably affected by this marine influence, which moderates climatic extremes and transports air pollutants into the area from distant sources such as the San Francisco Bay Area and the Sacramento region. Temperature moderation is especially evident on summer evenings when cooling occurs as a result of the penetration of sea breezes.

Weather in Roseville is characterized by summers that are typically hot and dry, and winters that are mild and wet. Summer temperatures range from an average low of 70°F to an average high of 90°F with temperatures in excess of 100°F being fairly common. This high average summer temperature, combined with very low relative humidity, produces hot, dry summers which contribute to ozone buildup. The winter season is characterized by overcast days and lengthy

periods of rain and drizzle. Winter temperatures range from an average low of 40°F to an average high of 57°F, with occasional overnight freezing temperatures. During winter months carbon monoxide (CO) accumulation is of concern. Annual precipitation averages 25 inches, and 90 percent falls from November through April. Prevailing winds are from the southwest with a secondary concentration from the northwest.

Surface or elevated temperature inversions are common in the late summer and fall. Surface inversions are formed when the air close to the surface cools more rapidly than the warm layer of air above it. Elevated inversions occur when a layer of cool air is suspended between warm air layers above and below it. Inversions result in air stagnation. Air pollutants accumulate under and within inversions, subjecting people in the region to elevated pollution levels and ensuing health concerns.

### **Criteria Air Quality Standards and Existing Concentrations**

Currently, most of the effort to improve air quality in the United States and California is directed toward the control of five pollutants, called "criteria" air pollutants: photochemical oxidants (ozone), CO, particulate matter less than ten microns in diameter (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>). Pollutants subject to federal ambient standards are referred to as "criteria" pollutants because the U.S. Environmental Protection Agency (U.S. EPA) publishes criteria documents to justify the choice of standards. The federal and State standards for the criteria pollutants of greatest concern in the SVAB -- ozone, CO, and PM<sub>10</sub> -- are provided in Table 4.10-1. Table 4.10-2 provides a summary of the health effects associated with major air pollutants. Specific air quality regulations are discussed below.

One of the most important reasons for air quality standards is the protection of those members of the population who are most sensitive to the adverse health effects of air pollution, termed "sensitive receptors". The term sensitive receptors refers to specific population groups as well as the land uses where they would reside for long periods. Commonly identified sensitive population groups are children, the elderly, the acutely ill, and the chronically ill. Commonly identified sensitive land uses are residences, schools, playgrounds, childcare centers, retirement homes or convalescent homes, hospitals, and clinics. Areas sensitive to air pollutants in or near the project area include residential areas and schools, and the Eskaton development. Other sensitive areas include the nearest right-of-way where the children and the elderly have continuous access such as sidewalks. Table 4.10-2 presents the health effects for ozone, CO and PM<sub>10</sub>.

To determine whether the ambient air pollutant concentrations in the Plan Area can cause health effects, ambient air pollutant concentrations must be measured. Three ambient air pollutant stations are in the vicinity of the Specific Plan area. The nearest monitoring stations are located at 151 North Sunrise Avenue in Roseville, about three and one half miles southeast of the Plan Area, and the North Highlands station in Sacramento County, about three and one half miles southwest of the Plan Area. The next-nearest monitoring facility is located at 5000 Rocklin Road in Rocklin, about five miles east of the Plan area. Recent ozone, CO, and PM<sub>10</sub> data collected at these three stations are summarized in Appendix G.



**TABLE 4.10-1****FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS**

| <b>Pollutant</b> | <b>Averaging Time</b> | <b>Federal Standard</b> | <b>California Standard</b> |
|------------------|-----------------------|-------------------------|----------------------------|
| Ozone            | 1-hour                | 0.12 ppm                | 0.09 ppm                   |
| Carbon Monoxide  | 1-hour                | 35.0 ppm                | 20.0 ppm                   |
|                  | 8-hour                | 9.5 ppm                 | 9.0 ppm                    |
| PM <sub>10</sub> | 24-hour               | 150 mcg/m <sup>3</sup>  | 50 mcg/m <sup>3</sup>      |
|                  | annual                | 50 mcg/m <sup>3</sup>   | 30 mcg/m <sup>3</sup>      |

**NOTES:**

ppm = parts per million

mcg/m<sup>3</sup> = micrograms per cubic meter

SOURCE: California Air Resources Board.

**TABLE 4.10-2****HEALTH EFFECTS SUMMARY OF THE MAJOR CRITERIA AIR POLLUTANTS**

| <b>Air Pollutant</b> | <b>Adverse Effects</b>                                                                                                                                                                                                                                                                            |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ozone                | eye irritation<br>respiratory function impairment                                                                                                                                                                                                                                                 |
| Carbon Monoxide      | impairment of oxygen transport in the blood stream, increase of carboxyhemoglobin<br>aggravation of cardiovascular disease<br>impairment of central nervous system function<br>fatigue, headache, confusion, dizziness<br>can be fatal in the case of very high concentrations in enclosed places |
| Particulate Matter   | increased risk of chronic respiratory disease with long exposure<br>altered lung function in children<br>with SO <sub>2</sub> , may produce acute illness<br>particulate matter 10 microns or less in size (PM <sub>10</sub> ) may lodge in and/or irritate the lungs                             |

SOURCE: Bay Area Air Quality Management District.

After air pollutant concentration data are collected, criteria air pollutants are classified in each air basin, county, or in some cases within a specific urbanized area. The classification is determined by comparing actual monitoring data with State and federal standards. If a pollutant concentration is lower than the standard, the pollutant is classified as "attainment" in that area. If an area exceeds the standard, the pollutant is classified as "non-attainment". If there are not enough data available to determine whether an area is exceeding the standard or not, the area is designated "unclassified".

The formation, health effects, ambient air pollutant concentrations, and classifications for the three key criteria pollutants in the SVAB are discussed below.

### **Ozone**

Ozone is a colorless gas with a pungent odor. Ozone causes eye irritation and respiratory function impairment. Most ozone in the atmosphere is formed as a result of the interaction of ultraviolet light, reactive organic gases (ROG), and oxides of nitrogen ( $\text{NO}_x$ ). ROG is composed of nonmethane hydrocarbons, and  $\text{NO}_x$  is made of different chemical combinations of nitrogen and oxygen, mainly NO and  $\text{NO}_2$ . Motor vehicles are the primary source of ROG and  $\text{NO}_x$ . A highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROG and  $\text{NO}_x$  levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because of these reactions occur on a regional scale, ozone is considered a regional pollutant.

Ambient ozone data collected at the Roseville, Rocklin and North Highlands stations are shown in Table G-1 of Appendix G. One-hour ozone concentrations reached 0.17 ppm at the Rocklin station in 1992 and exceeded the federal 0.12 ppm standard at one or more of these stations at least once during each of the last four years for which annual summary data is available. Annual maximum ozone levels have exceeded the State 0.09 ppm standard on several days per year at each of these stations. As part of the Sacramento Air Quality Maintenance Area (SAQMA) defined by the U.S. EPA, western Placer County has been designated as a severe non-attainment area for the federal ozone standard. As part of the SVAB, western Placer County is also designated as a non-attainment area for the State ozone standard.

### **Carbon Monoxide**

CO is an odorless, colorless, gas. CO causes a number of health problems including fatigue, headache, confusion, and dizziness (see Table 4.10-2). The incomplete combustion of petroleum fuels in on-road vehicles is a major cause of CO. CO is also produced during the winter from wood stoves and fireplaces. CO tends to dissipate rapidly into the atmosphere; consequently, violations of the CO state standard are generally limited to major intersections during peak hour traffic conditions.

Ambient ozone data collected at the Roseville, Rocklin and North Highlands stations are shown in Table G-1 of Appendix G. Amongst these three stations, the highest measured 1-hour concentration from 1992 through 1995 was 9 ppm (recorded at the Rocklin station in 1992), and

the highest measured 8-hour CO concentration was 6.3 (recorded at the North Highlands station in 1994). CO levels recorded at the Roseville air monitoring station were considered most representative of existing conditions in the project vicinity; however, the extensive future development projected for the west Placer County area may result in land use intensities and CO exposure conditions more similar to those experienced in North Highlands today. Therefore, Roseville monitoring data served as the basis for deriving existing background concentrations for the CO modeling in this report, and North Highlands monitoring data served as the basis for deriving future background concentrations for this modeling. The "urbanized areas" of Placer County are designated as non-attainment for the federal CO standards, although a State-prepared request to redesignate this and many other federal non-attainment areas to attainment status is currently pending before the U.S. EPA. Placer County is designated an unclassified area for State CO standards.

### **Particulate Matter Less Than Ten Microns (PM<sub>10</sub>)**

PM<sub>10</sub> consists of atmospheric particles resulting from fume-producing industrial and agricultural operations, and natural activities. Health impacts from inhaling particulates resulted in revision of the Total Suspended Particulate (TSP) standard to reflect particulates that are small enough to be considered "inhalable", i.e., 10 microns or less in size. Current standards define acceptable concentrations of particulates that are smaller than 10 microns in diameter, referred to as the PM<sub>10</sub>. PM<sub>10</sub> includes materials such as sulfates and nitrates, which can cause lung damage.

Ambient PM<sub>10</sub> data are also collected at the three monitoring stations mentioned previously, and are also presented in Table G-1 in Appendix G. Recorded PM<sub>10</sub> levels have exceeded the California 24-hour standard at one or more of these stations during the last four years for which annual summary data are available. The State's annual standard has not been exceeded at any of these stations during the same period. Placer County is designated an unclassified area for federal PM<sub>10</sub> standards and a non-attainment area for state PM<sub>10</sub> standards.

### **Toxic Air Contaminants**

In addition to the criteria pollutants, another group of substances, called Toxic Air Contaminants (TACs), are known to be highly injurious, even in small quantities. TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects (i.e., injury or illness). There are hundreds of substances that can be toxic when inhaled, but air quality standards have not been set for most of them.

TACs can be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations and painting operations. Natural source emissions include windblown dust and wildfires. Farms, construction sites, and residential areas can add to air toxic emissions. Research facilities can also be a source of toxic air contaminants. TACs include both organic and inorganic chemical substances. Examples include certain chlorinated hydrocarbons, such as solvents, certain metals, and asbestos.



### **Existing Emission Sources and Concentrations**

There are many types of air pollutant sources in the SVAB portion of Placer County. Basically, these sources are divided into two categories, mobile and stationary sources. The California Air Resources Board (CARB) maintains an emission inventory to determine the origin of air pollutants within the state's air basins and counties inside those air basins. Table 4.10-3 presents the latest ROG, NO<sub>x</sub>, CO and PM<sub>10</sub> emission inventory for the SVAB portion of Placer County.

Exhaust emissions from on-road motor vehicles are the primary source of ROG, NO<sub>x</sub>, CO, and SO<sub>2</sub> in the western portion of Placer County. Mobile sources account for approximately 58 percent of the ROG emissions, 87 percent of the NO<sub>x</sub> emissions and 67 percent of the CO emissions in this portion of the County. Because of the direct link between vehicular emissions and the formation of the non-attainment pollutant ozone, air quality programs focus on reduction of mobile source emissions, and significant reductions have been achieved, most notably through the mandated state automobile inspection and maintenance program. Unfortunately, reductions in air pollutants from mobile sources have not resulted in a corresponding decline in air pollutant violations in western Placer County. This is likely due to land development and increased traffic in the eastern Sacramento and western Placer Counties, combined with continued transport of pollutants from Sacramento Valley towards the Sierra Nevada foothills.

Mobile sources account for high CO concentrations at intersections. Existing CO concentrations were calculated at five intersections. A detailed discussion of the methods used is presented in the Method of Analysis, below. Modeling results are presented in Table 4.10-4. Modeling indicates that curbside receptors are exposed to 1-hour and 8-hour CO levels below the corresponding State standards even under reasonable worst-case atmospheric conditions.

Area-wide sources -- particularly entrained road dust and construction and demolition activities - are the primary sources of PM<sub>10</sub> in western Placer county, accounting for approximately 90 percent of PM<sub>10</sub> emissions.

There are several stationary sources in the vicinity of the Plan Area which are under the permit authority of the Placer County Air Pollution Control District (APCD). Examples include sources within Hewlett-Packard, NEC's semi-conductor manufacturing facility, the Roseville Area Peaking Facility (a power plant), Albertson's Distribution Center and various gas stations.<sup>1</sup>

### **4.10.3 REGULATORY SETTING**

Air quality is regulated by several agencies including the U.S. EPA, the CARB, and the Placer County APCD. Each of these agencies develop rules and/or regulations to attain the goals or directives imposed upon them through legislation. Although U.S. EPA regulations may not be superseded, both state and local regulations may be more stringent. In general, air quality evaluations are based upon air quality standards developed by the federal government and several State agencies. Emissions limitations are then imposed upon individual sources of air pollutants by local agencies. Mobile sources of air pollutants are largely controlled through federal and State agencies, while most stationary sources are regulated by the local APCDs or air quality management districts.

| TABLE 4.10-3                                                                                        |            |            |                 |                  |
|-----------------------------------------------------------------------------------------------------|------------|------------|-----------------|------------------|
| 1993 BASE YEAR EMISSIONS SUMMARY FOR<br>THE SACRAMENTO VALLEY AIR BASIN PORTION OF<br>PLACER COUNTY |            |            |                 |                  |
| Source Category                                                                                     | ROG        | CO         | NO <sub>x</sub> | PM <sub>10</sub> |
| <b>Stationary Sources</b>                                                                           |            |            |                 |                  |
| Fuel Combustion                                                                                     | --         | 1.8        | 1.1             | 0.3              |
| Solvent Use                                                                                         | 3.0        | --         | --              | --               |
| Petroleum Process,<br>Storage and Transfer                                                          | 0.6        | --         | --              | --               |
| Industrial Processes                                                                                | 2.1        | 0.1        | 0.1             | 0.8              |
| <i>Total Stationary Sources</i>                                                                     | <i>5.6</i> | <i>1.8</i> | <i>1.2</i>      | <i>1.1</i>       |
| <b>Area-Wide Sources</b>                                                                            |            |            |                 |                  |
| Solvent Evaporation                                                                                 | 3.1        | --         | --              | --               |
| Miscellaneous Processes                                                                             | 2.6        | 35         | 0.7             | 26               |
| <i>Total Area-Wide Sources</i>                                                                      | <i>5.7</i> | <i>35</i>  | <i>0.7</i>      | <i>26</i>        |
| <b>Mobile Sources</b>                                                                               |            |            |                 |                  |
| On-Road Vehicles                                                                                    | 11         | 95         | 15              | 1.3              |
| Other Mobile                                                                                        | 3.3        | 23         | 14              | 0.7              |
| <i>Total Mobile Sources</i>                                                                         | <i>15</i>  | <i>118</i> | <i>29</i>       | <i>1.9</i>       |
| <b>Natural (Non-Anthropogenic) Sources</b>                                                          |            |            |                 |                  |
| <i>Total Natural Sources</i>                                                                        | <i>--</i>  | <i>0.1</i> | <i>--</i>       | <i>--</i>        |
| <b>TOTAL</b>                                                                                        | <b>26</b>  | <b>155</b> | <b>31</b>       | <b>29</b>        |
| SOURCE: Air Resources Board, 1995.                                                                  |            |            |                 |                  |

TABLE 4.10-4

**PREDICTED EXISTING MAXIMUM 1-HOUR AND 8-HOUR  
CARBON MONOXIDE CONCENTRATIONS (IN PPM)**

| <b>Location</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Averaging<br/>Time</b> | <b>Existing</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|
| 1. Foothill & Blue Oaks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1-hr.                     | 16.1            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8-hr.                     | 6.6             |
| 2. Foothill & Junction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1-hr.                     | 12.4            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8-hr.                     | 7.1             |
| 3. Foothill & Baseline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1-hr.                     | 13.9            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8-hr.                     | 7.2             |
| 4. Washington & Main                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1-hr.                     | 10.4            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8-hr.                     | 4.8             |
| 5. Woodcreek & Baseline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1-hr.                     | 11.1            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8-hr.                     | 5.5             |
| Background Concentrations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1-hr.                     | 4.5             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8-hr.                     | 2.4             |
| California Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1-hr.                     | 20.0            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8-hr.                     | 9.0             |
| <p>Note: The tabulated concentrations are the sums of a background component, which includes the cumulative effects of all CO sources in the project vicinity, and a local component, which reflects the effects of vehicular traffic on roadways. Local CO components were derived from the CALINE4 computer program, assuming worst-case conditions at the intersections. The location of the 1-hour receptor is at the curbside and the 8-hour receptor is 10 meters from the curb. Traffic data was provided by DKS Associates.</p> |                           |                 |
| SOURCE: EIP Associates, 1996.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                           |                 |



Placer County spans three air basins in California: the southwestern third of the county, which includes the Plan Area, is within the SVAB; the northeastern portion is within the Lake Tahoe Air Basin; and, the remainder is within the Mountain Counties Air Basin. Because air quality is sometimes regulated on a county-by-county basis and sometimes on a regional basis (or within an air basin), air quality regulations and planning efforts in Placer County are intricate. For instance, under federal law, a large region called the SAQMA, which includes Sacramento, and parts of Yolo, Solano, and Placer Counties (including Roseville), has been designated non-attainment for the federal ozone standard. Consequently, the jurisdictions in this region must solve the ozone problem jointly.

### **Federal**

The Federal Clean Air Act of 1970, as amended, established air quality standards for several pollutants. These standards are divided into primary standards and secondary standards. Primary standards are designed to protect the public health, and secondary standards are intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. In addition, the State of California has adopted its own standards. The State and federal standards for the pollutants of greatest concern in the SVAB are presented in Table 4.10-1.

In 1977, the U.S. EPA designated the SAQMA a non-attainment area for ozone and carbon monoxide. This non-attainment status was based on continued violations of the federal primary standards for these pollutants. Improvement in levels of these pollutants has occurred in the past several years, but the standards have not been met.

The Federal Clean Air Act required that regional plans be prepared for non-attainment areas illustrating how the federal air quality standards could be met by December 31, 1987. The Sacramento Area Council of Governments (SACOG) and member government agencies prepared programs designed to reduce emissions in the region through stationary source controls, transportation control measures, and mobile source controls.

Roseville is one of many urban areas that failed to attain the National Ambient Air Quality Standards by 1987. The 1982 Sacramento Air Quality Plan was disapproved by the U.S. EPA because it did not demonstrate attainment of the standards as required by the Clean Air Act. A construction ban on all new sources emitting more than 100 tons per year or expansion of existing sources by more than 40 tons per year of any primary pollutant has been imposed upon the Sacramento Air Quality Maintenance Area.

The U.S. EPA has adopted interim policies regarding post-1987 non-attainment areas. These policies gave non-attainment areas until the end of 1990 to revise the State Implementation Plan (SIP) to demonstrate attainment and maintenance of the standards. After submittal of the revised SIP, the U.S. EPA would classify non-attainment areas as near term (three to five years) or long term (more than five years). For near-term non-attainment areas, pollutant reductions of three percent per year would have to occur until standards are attained, and maintenance of the standard for a period of 10 years would have to be demonstrated.

The CARB approved the State Implementation Plan (SIP) on November 15, 1994, and submitted the SIP to the U.S. EPA. The SIP was approved by the EPA in September 1996. The SIP consists of a list of ROG and NO<sub>x</sub> control measures for demonstrating future attainment of ozone standards. The steps to achieve attainment will require significant emissions reductions in both stationary and mobile sources.

On November 29, 1996, the U.S. EPA issued new draft standards for both ozone and particulate matter. The EPA's preferred new ozone standard is an eight-hour average of 0.08 ppm rather than the existing 0.12 ppm one-hour average standard. While converting from a one-hour to an eight-hour averaging basis would, by itself, make the new standard easier to attain, dropping the target concentration from 0.12 to 0.08 would more than compensate for this change in averaging period, resulting in a more stringent standard. Attainment would be evaluated by determining the third-highest daily maximum concentration at a given site each year. If the average of such concentrations over a consecutive three-year period exceeds the 0.08 ppm threshold, then the site (and therefore the plan area within which the site is located) is not in attainment of the standard. Currently, a site is considered non-attainment if more than three exceedances of the one-hour standard had occurred over the previous three years. The new eight-hour averaging period and attainment definitions would tend to reduce the potential for unusual climactic conditions during a single year to influence a site's attainment status. Nevertheless, the more conservative basic concentration threshold would make it more difficult for West Placer County and the rest of the SAQMA to demonstrate future attainment of the new federal ozone standard if the preferred standard is implemented. (The EPA is also considering two alternative concentration standards.)

The EPA also proposes a minor revision of current PM<sub>10</sub> standards, and the addition of PM<sub>2.5</sub> standards in recognition of increased concern over particulates 2.5 microns or less in diameter. Placer County is not one of the counties identified by the EPA as being likely to exceed the revised PM standards. However, only after implementation of PM<sub>2.5</sub> monitoring could this initial prediction be confirmed.

The EPA has established a June 1997 target for issuance of final standards.

### **State of California**

The State of California has had its own ambient air quality standards for many years. These ambient standards are, in general, more stringent than the existing federal standards for the criteria air pollutants. Until recently, however, the State standards were not required to be attained by any specific date.

The California Clean Air Act was signed into law on January 2, 1989. This legislation requires areas that exceed the California ambient air quality standards to plan for the eventual attainment of the standards. Areas have been designated as attainment or nonattainment with respect to the ambient air quality standards. The time given to various areas would depend upon the severity of air quality problems. The California Health and Safety Code Section 40914(A) requires that districts design a plan to achieve an annual reduction in district-wide emissions of five percent or more for each nonattainment criteria pollutant or its precursor, averaged every consecutive three-year period, beginning at base year 1987.



California's state air quality management agency, CARB, regulates mobile emissions sources, and oversees the activities of County APCDs and regional AQMDs. The CARB regulates local air quality indirectly by establishing vehicle emission standards, by conducting research activities, and through its planning and coordinating activities.

### **Placer County Air Pollution Control District**

The Plan Area is within the jurisdiction of the Placer County APCD. The Placer County APCD regulates air quality through its permit authority and through its planning and review activities over most types of stationary emission sources. The Placer County APCD is responsible for implementing emissions standards and other requirements of federal and State laws.

The Plan Area is part of the SAQMA. Each county adopted individual programs to reduce air pollution. These locally adopted programs, along with the programs of county APCDs and requirements for restrictions on automobiles by the CARB, formed the Air Quality Plan for the Air Basin required by the CAA Amendments of 1977. The Plan established air pollution control strategies intended to attain federal air quality standards by the December 31, 1987 deadline. The U.S. EPA disapproved the 1982 Air Quality Maintenance Plan on December 1, 1988, based on the inability of the Sacramento Plan to demonstrate attainment of federal ozone standards in the near future.

As required by the California Clean Air Act (CCAA), Placer County APCD has published its *Air Quality Attainment Plan*. The Plan addresses the CCAA requirement to attempt to bring the District into compliance with the State ambient air quality standards. The Plan focuses on O<sub>3</sub> and CO. The Plan includes carefully planned strategies for progressive reduction of air pollutants by promoting active public involvement, by encouraging compliance through positive influence and behavior, and through public education in both the public and private sectors.

Toxic air contaminants are considered separately from the criteria pollutants in the regulatory process. Few regulatory standards have been set for TACs. Due to the lack of specific emission standards for TACs and the variety of substances that could be considered TACs, a health risk assessment is generally performed to estimate the potential for health risks associated with emission of TACs from proposed projects which appear to have the potential for high TAC emissions.

### **City of Roseville**

The City of Roseville's General Plan contains an Air Quality Element with seven goals and eleven policies (see Appendix C) to improve the air quality in Roseville and comply and coordinate with the Placer County APCD's plans and concerns. The City has general, transportation, land use, energy-conservation, and hazardous material related policies to improve air quality in Roseville.



#### 4.10.4 IMPACTS

Because air quality impacts are dependent on both project-generated and cumulative automobile trips, and because development within the Plan Area is expected to occur over several years, the 2010 Market condition, rather than existing conditions, is used as the baseline for the vehicle emissions analysis. An Existing Plus Project analysis is presented in Appendix D.

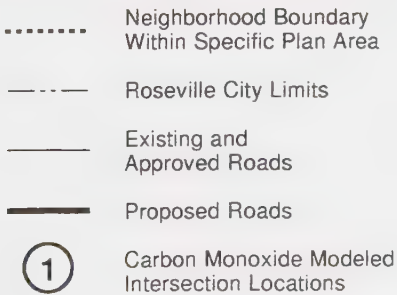
##### **Method of Analysis**

Construction-related emission factors, both before and after mitigation, were obtained from the SMAQMD's *Air Quality Thresholds of Significance* document. These factors are based upon the scale of construction activities, e.g., the number of acres being graded or the number of residential units being constructed. Since these factors represent daily rates, it is generally the amount of construction activity per day rather than total construction activity that determines the rate of emissions. Since these daily rates are difficult to establish precisely, the SMAQMD factors were used to determine the approximate minimum rate of construction activities that would generate emissions exceeding significance criteria. A judgement was then made as to the likelihood that project construction activities would exceed this rate, and a significance determination made on this basis.

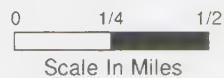
Operational mobile-source emissions were based upon the trip generation figures presented in Section 4.9, Transportation and Circulation, of this EIR. As discussed in the Method of Analysis for Section 4.9, the traffic modelling was conducted for an earlier version of the Proposed Project, which assumed more residential units. Therefore, trip generation and traffic impacts, as well as the air quality analysis that is based on traffic modelling, could be overstated by as much as three percent. Emissions from vehicle exhaust and tire wear were derived using the CARB's URBEMIS5 model, using year 1999 emission factors. PM<sub>10</sub> emissions resulting from entrainment of road dust by motor vehicles were estimated based upon a factor used by the Bay Area Air Quality Management District. Stationary source emissions were based upon emission factors relating to natural gas consumption obtained from the SMAQMD.

Carbon monoxide concentrations were predicted at eight different intersections using CALINE4, the fourth generation California Line Source Dispersion Model, developed by Caltrans. Five of the eight intersections were analyzed for the Existing (Baseline) timeframe, and seven of the eight intersections were analyzed for the Year 2010 Market scenario. Emission factors were calculated using the Caltrans model CT-EMFAC which uses the California Air Resources Board EMFAC7F version 1.1 emission factors.<sup>2</sup> Table G-2 from Appendix G presents the assumptions for inputs into the CALINE4 model used in this EIR. Figure 4.10-1 shows locations of modeled intersections.

To reflect total concentrations, the ambient CO concentration of the vicinity is added to the CO concentration predicted by CALINE4. The ambient concentration is calculated as the second highest annual 1-hour and highest annual 8-hour observation at the nearest representative monitoring station over the past three years. It is then adjusted downward based on future year rollback percentages presented in Table 13 of the SMAQMD's *Air Quality Thresholds of Significance*. The predicted CALINE4 concentration is calculated for the 1-hour averaging time.



## Carbon Monoxide Modeled Intersection Locations



96063  
Base







For 8-hour concentrations, the modeled 1-hour value is multiplied by an adjustment factor. The current analysis applies persistence factors presented Caltrans' *Transportation Project-Level Carbon Monoxide Protocol*, which correlates with the development intensity of the area in which modeling is performed. Since CO levels would be dependant both upon project-generated motor vehicle trips and cumulative trips, and since it is expected that development within the Plan Area would proceed over several years, a 2010 Market condition, rather than the site's existing condition, is used as the baseline scenario for CO analysis. The Existing Plus Project condition is presented in Appendix D.

### **Standards of Significance**

Air quality impacts would be considered significant if:

- The Proposed Project would cause or contribute to local CO concentrations exceeding 20 ppm over a 1-hour averaging period or 9 ppm over an 8-hour averaging period at worst-case locations near congested intersections;
- The Proposed Project's construction or operational emissions would exceed the following thresholds from the SCAQMD's *Air Quality Thresholds of Significance* document:
  - ROG: 85 lb/day
  - NO<sub>x</sub>: 85 lb/day
  - PM<sub>10</sub>: 275 lb/day;
- The Proposed Project would be inconsistent with the goals of relevant air quality plans, particularly the 1994 *Sacramento Area Regional Ozone Attainment Plan*; or
- Proposed Project residents would be substantially affected by criteria air pollutants, TACs and/or odors emitted from existing or proposed sources.

### **PHASE I IMPACTS**

This section identifies and discusses air quality impacts resulting from development of Phase I.

|                               |                                                                                                            |
|-------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-1(A):</b>      | <b>Short-term air pollutant emissions during construction.</b>                                             |
| <b>SIGNIFICANCE:</b>          | Short-term significant                                                                                     |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.10-1(a)(Provide dust control),<br>4.10-1(b)(Properly maintain construction equipment) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                      |

Equipment and vehicles used during the grading portion of Phase I construction would temporarily increase PM<sub>10</sub> emissions during clearing of vegetation, excavation, and grading. In addition, construction vehicles traveling on unpaved surfaces generate dust, as does wind blowing over exposed earth. The exhaust of the powered equipment and vehicles would emit a variety

of different pollutants, most importantly ROG, NO<sub>x</sub> and CO as well as small amounts of PM<sub>10</sub>. In addition, application of architectural coatings and asphalt results in short-term emissions of ROG. Such emissions could contribute to regional air pollution problems and (particularly for PM<sub>10</sub> and CO) locally-elevated pollutant concentrations which would impact nearby receptors. Such receptors could include residents of existing adjacent homes, future homes adjacent to the Plan Area, and future planned residential and commercial uses within the Plan Area. Potentially vulnerable off-site residences would include those along the northern edge of the Del Webb Sun City Roseville development. Project residential and commercial land uses would be affected as subsequent phases of the Proposed Project are constructed.

Mitigation Measures 4.10-1(a) and (b) are recommended to reduce PM<sub>10</sub> emissions during grading/site preparation, and exhaust emissions from mobile and stationary equipment. After mitigation, impacts would be less than significant.

|                               |                                                                                                    |
|-------------------------------|----------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-2(A):</b>      | <b>Project-related operational air pollutant emissions (ROG, NO<sub>x</sub>, PM<sub>10</sub>).</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                        |
| <b>MITIGATION MEASURE:</b>    | None identified                                                                                    |
| <b>RESIDUAL SIGNIFICANCE:</b> | Significant                                                                                        |

Project development would result in air pollutant emissions from project-generated motor vehicle trips and land-use-based sources such as natural gas combustion. Table 4.10-5 presents emission totals expected from these two source groups for both Phase I and Full Project development. Based upon motor vehicle exhaust and tire wear emission factors for the year 1999 (and the dust entrainment factor discussed under the Methods heading, above), Phase-I-related emissions of ROG, NO<sub>x</sub> and PM<sub>10</sub> are all expected to exceed applicable significance criteria by themselves. Natural gas emissions are projected to represent a small proportion of total project-related operational emissions.

**TABLE 4.10-5****PROJECT OPERATIONAL EMISSIONS**

| Pollutant        | SMAQMD Significance Guideline <sup>1</sup> | Phase I             |                         |       |                     | Full Project        |                         |       |                      |
|------------------|--------------------------------------------|---------------------|-------------------------|-------|---------------------|---------------------|-------------------------|-------|----------------------|
|                  |                                            | Emissions (lbs/day) |                         |       | Guideline Exceeded? | Emissions (lbs/day) |                         |       | Guideline Exceeded ? |
|                  |                                            | Mobile <sup>2</sup> | Stationary <sup>3</sup> | Total |                     | Mobile <sup>2</sup> | Stationary <sup>3</sup> | Total |                      |
| ROG              | 85                                         | 373                 | 4                       | 377   | Yes                 | 660                 | 7                       | 667   | Yes                  |
| NO <sub>x</sub>  | 85                                         | 302                 | 58                      | 360   | Yes                 | 522                 | 105                     | 627   | Yes                  |
| PM <sub>10</sub> | 275                                        | 423                 | 0.1                     | 423   | Yes                 | 738                 | 0.2                     | 738   | Yes                  |

<sup>1</sup> These guidelines were obtained from the SMAQMD's *Air Quality Thresholds of Significance* document.

<sup>2</sup> Mobile-source emissions were based upon the trip generation figures presented in the Traffic and Circulation section of this report. Emissions from vehicle exhaust and tire wear were derived using the CARB's URBEMIS5 model, using year 1999 emission factors.

PM<sub>10</sub> emissions resulting from entrainment of road dust by motor vehicles were estimated based upon a factor used by the Bay Area Air Quality Management District.

<sup>3</sup> Stationary source emissions were based upon emission factors relating to natural gas consumption obtained from the SMAQMD.

SOURCE: EIP Associates, 1997.



The City has a Transportation System Management Ordinance which includes requirements intended to reduce mobile-source emissions. Compliance with the TSM Ordinance would reduce the amount of pollutants emitted by the Proposed Project, but not to a less-than-significant level.

|                            |                                                         |
|----------------------------|---------------------------------------------------------|
| <b>IMPACT 4.10-3(A):</b>   | <b>Increases of CO concentrations at intersections.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                   |
| <b>MITIGATION MEASURE:</b> | None required                                           |

Under Year 2010 conditions, average emission rates for the on-road motor vehicle fleet are projected to be much lower than they are today. These lower rates are reflected in the CO modeling presented in Table 4.10-6. Since motor vehicle exhaust is the primary source of CO emissions in western Placer County (and elsewhere), lower regional background CO levels are anticipated as well. Therefore, despite the increased traffic volumes and congestion anticipated throughout much of the project vicinity relative to existing conditions, CO concentrations at the seven intersections modeled for the Year 2010 Market No Project scenario (including Highland Reserve North Phases I and II) remain below applicable State standards under No Project. Under the Year 2010 Market Plus Project Phase I scenario (including Highland Reserve North Phase I), projected CO levels at five of the eight intersections would increase by 0.1 to 2.6 ppm. However, none of these increases would result in levels exceeding State standards. At two of the eight intersections, a decrease in CO is projected. Results at these intersections may be influenced by the inclusion of Highland Reserve North Phase II in the No Project scenario. The results may have also been influenced by the increased carrying capacity of the local roadway network resulting from project-related roadway additions and extensions. 8-hour average CO levels are projected to show a similar pattern, but variations in concentrations are about half as large as they are for the 1-hour averages.

Note that, even under the 2010 Market Plus Project Phases I and II scenario (including both Phases I and II of Highland Reserve North), CO levels are not projected to exceed applicable standards. Therefore, it can be concluded that CO impacts under Phase I by itself would also be less than significant whether or not Phase II of Highland Reserve North is built.

|                            |                                                                   |
|----------------------------|-------------------------------------------------------------------|
| <b>IMPACT 4.10-4(A):</b>   | <b>Exposure of Plan Area residents to minor amounts of odors.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                             |
| <b>MITIGATION MEASURE:</b> | None required                                                     |

Phase I of the Plan Area would be located near and adjacent to several existing sources of odors, the greatest of which are animal and agricultural odors from animal wastes and pesticides to the north and west. Other potential odor sources are considered minor. These additional sources include the landfill north of the northern boundary of the Plan Area, various industrial facilities to the north and east, and the on-site wastewater pump station. Possible future sources include the potential regional wastewater treatment plant site approximately 0.8 mile to the north west of the Mourier 160 property<sup>3</sup> and the proposed ranch property on the east side of proposed



TABLE 4.10-6

**PREDICTED MAXIMUM 1-HOUR AND 8-HOUR  
CARBON MONOXIDE CONCENTRATIONS (IN PPM)**

| Location                      | Averaging Time | No Project (+HRN Phases I&II) | Project Phase I (+HRN Phase I) | Full Project (+HRN Phases I&II) |
|-------------------------------|----------------|-------------------------------|--------------------------------|---------------------------------|
| 1. Foothill & Blue Oaks       | 1-hr.          | 5.4                           | 5.7                            | 4.9                             |
|                               | 8-hr.          | 3.7                           | 4.4                            | 4.2                             |
| 2. Foothill & Junction        | 1-hr.          | 5.0                           | 5.0                            | 4.3                             |
|                               | 8-hr.          | 3.4                           | 3.3                            | 3.0                             |
| 4. Washington & Main          | 1-hr.          | 5.0                           | 4.7                            | 4.9                             |
|                               | 8-hr.          | 3.4                           | 3.2                            | 3.3                             |
| 5. Woodcreek & Baseline       | 1-hr.          | 4.6                           | 4.6                            | 5.5                             |
|                               | 8-hr.          | 2.7                           | 2.8                            | 3.2                             |
| 6. Woodcreek & Pleasant Grove | 1-hr.          | 5.8                           | 5.9                            | 5.6                             |
|                               | 8-hr.          | 3.6                           | 4.2                            | 4.1                             |
| 7. Woodcreek & Blue Oaks      | 1-hr.          | 3.6                           | 6.2                            | 5.6                             |
|                               | 8-hr.          | 2.6                           | 3.9                            | 3.7                             |
| 8. Fiddymment & Baseline      | 1-hr.          | 5.4                           | 5.7                            | 4.9                             |
|                               | 8-hr.          | 3.8                           | 3.9                            | 3.5                             |
| Background Concentrations     | 1-hr.          | 2.5                           | 2.5                            | 2.5                             |
|                               | 8-hr.          | 1.9                           | 1.9                            | 1.9                             |
| California Standards          | 1-hr.          | 20                            | 20                             | 20                              |
|                               | 8-hr.          | 9.0                           | 9.0                            | 9.0                             |

Note: The tabulated concentrations are the sums of a background component, which includes the cumulative effects of all CO sources in the project vicinity, and a local component, which reflects the effects of vehicular traffic on roadways. Local CO components were derived from the CALINE4 computer program, assuming worst-case conditions at the intersections. The location of the 1-hour receptor is at the curbside and the 8-hour receptor is 10 meters from the curb. Traffic data was provided by DKS Associates.

SOURCE: EIP Associates, 1997.

Neighborhood A (Diamond Creek property). Landfills and wastewater treatment plants are typically considered sources of odor; however, odors from these sources would be diluted by distance as would be the odors from the industrial areas to the north and east of the Plan Area residential designations. The NRSP requires that residential development be at least 50 feet from the agricultural land use, so neighboring residents would not be subjected to substantial odors. The existing Pleasant Grove Creek wastewater pump station on the eastern edge of Neighborhood A (Diamond Creek) just south of the Pleasant Grove Creek does not produce any noticeable odors at the fence line of the pump station. Therefore, this impact is considered less than significant.

|                               |                                                         |
|-------------------------------|---------------------------------------------------------|
| <b>IMPACT 4.10-5(A):</b>      | <b>Inconsistency with Air Quality Attainment Plans.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                             |
| <b>MITIGATION MEASURE:</b>    | None available                                          |
| <b>RESIDUAL SIGNIFICANCE:</b> | Significant                                             |

Vehicle emissions are the primary source of criteria air pollutants and are addressed in regional and County air quality plans. Existing land use designations on the Phase I development sites include agricultural and light industrial. Development consistent with these designations and 2010 market assumptions would generate approximately 7,600 daily motor vehicle trips. By comparison, development of Phase I of the Proposed Project would generate about 34,000 trips at 2010. Therefore, Phase I emissions would exceed emissions under the existing land uses at 2010, and those assumed for the sites in the 1994 Sacramento Area Regional Ozone Attainment Plan and the 1991 Placer County Air Quality Attainment Plan.<sup>4</sup> This would be considered a significant impact.<sup>5</sup> It should be noted that the existing light industrial designation would produce substantially more vehicle trips at buildout (approximately 30,500) than at 2010. In combination with stationary sources, vehicle emissions at buildout of the light industrial designation could approach or exceed emissions under the Proposed Project. Compliance with the City's Transportation Systems Management Ordinance would lessen this impact, but it would remain significant and unavoidable.

|                            |                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-6(A):</b>   | <b>Exposure of residents to criteria air pollutants generated by nearby stationary sources.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                           |
| <b>MITIGATION MEASURE:</b> | None required                                                                                   |

Future residents of the Phase I properties would be exposed to air pollutant emissions from designated industrial areas north and east of the Plan Area. The Roseville Area Peaking Facility, approximately 1,800 feet from the closest proposed residential area within Neighborhood A (Diamond Creek property), generates approximately 51 pounds per hour of NO<sub>x</sub>, 22 pounds per hour of CO, 8 pounds per hour of TOG, and 4.3 pounds per hour of TSP during periods of power generation.<sup>6</sup> However, such periods are generally limited to no more than several hours per day during warm weather periods. Other sources, such as certain uses at NEC or the Hewlett-Packard campus may also produce large amounts of air pollutants. However, the effect of these stationary source emissions on Plan Area residents would be minor relative to local CO impacts from nearby roadway traffic, area-wide PM<sub>10</sub> effects and regional ozone formation. In

addition, any new or revised stationary source must obtain a permit from the Placer County APCD before the new or revised source can operate. Any new stationary sources would need to comply with the Placer County APCD Rules and Regulations, which would require stationary source emissions controls. Therefore, this impact is considered less than significant.

|                            |                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-7(A):</b>   | <b>Exposure of residential areas to toxic air contaminants generated by stationary sources.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                           |
| <b>MITIGATION MEASURE:</b> | None required                                                                                   |

Residents within and surrounding Phase I of the Plan Area could be exposed to TACs generated by stationary sources. Certain substances used and stored at off-site facilities in the vicinity of the Plan Area are potentially toxic and could evaporate, resulting in TAC emissions. Facilities that may use and store potentially toxic substances include the Roseville Area Peaking Facility, NEC, and Hewlett-Packard. Such substances include oils and other lubricants and chlorinated solvents. Any new or revised stationary TAC source would need to obtain a permit from the Placer County APCD and complete a health risk assessment before the new or revised source can operate. Furthermore, at the nearest project residents, existing permit requirements would assure that TAC emissions from existing sources would not add a substantial amount to general background TAC levels at the minimum distance of about 2,000 feet between these sources and the proposed residences. Therefore, this impact would be less-than-significant.

## **FULL PROJECT IMPACTS**

|                               |                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-1(B):</b>      | <b>Short-term air pollutant emissions during construction.</b>                                                    |
| <b>SIGNIFICANCE:</b>          | Short-term significant                                                                                            |
| <b>MITIGATION MEASURE:</b>    | Implement Mitigation Measure 4.10-1(a)(Provide dust control), 4.10-1(b)(Properly maintain construction equipment) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                             |

Unmitigated short-term air pollutant emissions during construction would be significant under the Full Project, as they would be under Phase I alone. While it is unlikely that peak daily emissions would be any higher with the addition of Phase II, the overall duration of grading-related emissions impacts would be greater than under Phase I alone. Since Phase II areas would generally be closer to existing development than Phase I areas would be, a larger number of existing receptors could be exposed to temporary localized increases in pollutant concentrations as a result of construction activities. Potentially vulnerable off-site residences include those south and east of the Woodcreek West property and south of the Woodcreek North property near Jonquil Drive as well as residents near the southern edge of the Del Webb Sun City Roseville development north of the Woodcreek West property. The Phase I neighborhoods would already have a large number of occupants by the time construction of Phase II commenced, so additional on-site receptors would be exposed to these construction-related pollutant impacts.



Mitigation Measures 4.10-1(a) and (b) are recommended to reduce PM<sub>10</sub> emissions during grading/site preparation, ROG emissions during application of architectural coatings to new homes and buildings, and exhaust emissions from mobile and stationary equipment. After mitigation, impacts would be less than significant.

|                          |                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-2(B):</b> | <b>Project-related operational air pollutant emissions (ROG, NO<sub>x</sub>, PM<sub>10</sub>).</b> |
| SIGNIFICANCE:            | Significant                                                                                        |
| MITIGATION MEASURE:      | None identified                                                                                    |
| RESIDUAL SIGNIFICANCE:   | Significant                                                                                        |

As shown in Table 4.10-5, the Full Project would generate operational emissions approximately double those that would occur under Phase I alone. Since such emissions under Phase I alone were significant, those under Phases I and II would also be significant based upon the same analysis year. In fact, Phase II buildout could occur several years after Phase I is substantially built and occupied, and by that time average emission factors for the on-road motor vehicle fleet may have decreased substantially. However, operational emissions may still exceed significance criteria even for this more distant future scenario.

The City has a Transportation System Management Ordinance which includes requirements intended to reduce mobile-source emissions. Compliance with the TSM Ordinance would reduce the amount of pollutants emitted by the Proposed Project, but not to a less-than-significant level.

|                          |                                                         |
|--------------------------|---------------------------------------------------------|
| <b>IMPACT 4.10-3(B):</b> | <b>Increases of CO concentrations at intersections.</b> |
| SIGNIFICANCE:            | Less than significant                                   |
| MITIGATION MEASURE:      | None required                                           |

As shown in Table 4.10-6, projected future CO levels remain below applicable State standards even when traffic generated by the Full Project is added to the roadway network. Relative to the 2010 Market No Project scenario, 1-hour average CO levels are projected to increase by 0.7 to 2.0 ppm at two of the eight analyzed intersections, and to decrease by 0.1 to 0.7 at six of the analyzed intersections. 8-hour average CO levels are projected to show a similar pattern, but variations in concentrations are about half as large as they are for the 1-hour averages. Projected decreases in CO levels most likely result from the projected increase in carrying capacity of the roadway network in the project vicinity due to project-related roadway additions and expansions, perhaps combined with redistribution of cumulative motor vehicle trips on this expanded network.

|                          |                                                                   |
|--------------------------|-------------------------------------------------------------------|
| <b>IMPACT 4.10-4(B):</b> | <b>Exposure of Plan Area residents to minor amounts of odors.</b> |
| SIGNIFICANCE:            | Less than significant                                             |
| MITIGATION MEASURE:      | None required                                                     |

Most of the existing and potential future odor sources in the vicinity of the Plan Area would affect Phase I development areas more than the remainder of the Full Project development site, because Phase I is closer to industrial uses and the landfill (neither of which are expected to generate substantial odors). The increase in total odor exposure with the addition of Phase II would be relatively minor, and odor impacts with development of the Full Project would remain less than significant.

|                          |                                                         |
|--------------------------|---------------------------------------------------------|
| <b>IMPACT 4.10-5(B):</b> | <b>Inconsistency with Air Quality Attainment Plans.</b> |
| SIGNIFICANCE:            | Significant                                             |
| MITIGATION MEASURE:      | None available                                          |
| RESIDUAL SIGNIFICANCE:   | Significant                                             |

Full Project development would result in greater trip generation (about 58,000 daily trips) and greater total emissions than would occur under site development consistent with current land use year 2010 designations. Therefore, Full Project development would be inconsistent with the emissions projections and basic goals of applicable air quality plans, which is a significant impact. The City's TSM Ordinance would reduce air emissions, thereby decreasing inconsistency with local air quality plans; however, this impact would remain significant and unavoidable.

|                          |                                                                                                 |
|--------------------------|-------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-6(B):</b> | <b>Exposure of residents to criteria air pollutants generated by nearby stationary sources.</b> |
| SIGNIFICANCE:            | Less than significant                                                                           |
| MITIGATION MEASURE:      | None required                                                                                   |

Most of the existing and potential future stationary criteria air pollutant sources in the vicinity would affect Phase I, because of its proximity to light industrial uses. The increase in total exposure to pollutants from these sources with the addition of Phase II would be relatively minor, and the overall impact would remain less than significant.

|                          |                                                                                                 |
|--------------------------|-------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.10-7(B):</b> | <b>Exposure of residential areas to toxic air contaminants generated by stationary sources.</b> |
| SIGNIFICANCE:            | Less than significant                                                                           |
| MITIGATION MEASURE:      | None required                                                                                   |

Most of the existing and potential future stationary sources of TACs in the vicinity would affect Phase I because of its proximity to light industrial uses. The increase in total exposure to TACs from these sources with the addition of Phase II would be relatively minor, and the overall impact would remain less than significant.

## 4.10.5 MITIGATION MEASURES

### SHORT-TERM AIR POLLUTANT EMISSIONS DURING CONSTRUCTION.

Mitigation Measures 4.10-1(a) and (b) apply to Impacts 4.10-1(A) and (B).

#### **Mitigation Measure 4.10-1(a): Provide dust controls.**

In order to reduce construction-generated PM<sub>10</sub> emissions, the contractor shall comply with the dust control strategies developed by the Placer County APCD. The developer shall include in construction contracts the following requirements or measures shown to be equally effective:

- (i) The contractor shall water as indicated by City inspectors to keep all earth surfaces moist during clearing, grading, earthmoving and other site preparation activities.
- (ii) The contractor shall sweep streets within and adjacent to the project as needed or as directed by City inspectors.
- (iii) The contractor shall schedule clearing, grading and earthmoving activities during periods of low wind speeds, and restrict those construction activities during high wind conditions with wind speeds greater than 20 mph average during an hour.
- (iv) The contractor shall minimize open burning of wood and vegetative waste materials from both construction and operation of the project. No open burning shall occur unless it can be demonstrated to the Placer County APCD that alternatives have been explored. These alternatives may include, but are not limited to, chipping, mulching and conversion to biomass fuel. For any open burning, an APCD permit must be obtained in conformance with APCD Regulation 3 (Open Burning), Rules 301-325.

#### **Mitigation Measure 4.10-1(b): Maintain construction equipment.**

Contractors shall maintain construction equipment per manufacturers' guidelines.



TABLE 4.10-7

## AIR QUALITY RESIDUAL IMPACT SUMMARY TABLE

| Impacts                                                                                                           | Phase I Impacts       | Full Project Impacts  |
|-------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| 4.10-1(A) and (B) Short-term air pollutant emissions during construction.                                         | Less than significant | Less than significant |
| 4.10-2(A) and (B) Project-related operational air pollutant emissions (ROG, NO <sub>x</sub> , PM <sub>10</sub> ). | Significant           | Significant           |
| 4.10-3(A) and (B) Increases of CO concentrations at intersections.                                                | Less than significant | Less than significant |
| 4.10-4(A) and (B) Exposure of Plan Area residents to minor amounts of odors.                                      | Less than significant | Less than significant |
| 4.10-5(A) and (B) Inconsistency with Air Quality Attainment Plans.                                                | Significant           | Significant           |
| 4.10-6(A) and (B) Exposure of residents to criteria air pollutants generated by nearby stationary sources.        | Less than significant | Less than significant |
| 4.10-7(A) and (B) Exposure of residential areas to toxic air contaminants generated by stationary sources.        | Less than significant | Less than significant |

**ENDNOTES**

1. Ann Hobbs, Placer County Air Pollution Control District, personal communication, May 23, 1995.
2. California Department of Transportation, *CT-EMFAC, Caltrans Version of EMFAC7F (Version 1.1)*. Caltrans Division of New Technology, Materials and Research, Sacramento, July 12, 1994.
3. Derrick Whitehead, City of Roseville Environmental Utilities Department, facsimile transmission from, June 12, 1995.
4. City of Roseville, *Comprehensive Land Use Element Update Project*, February, 1995.
5. Ibid.
6. Notice of Determination for the Roseville Area Peaking Facility, August 27, 1984.





---

---

#### ***4.11 NOISE***

---

---



---

---

## **4.11 NOISE**

---

---

### **4.11.1 INTRODUCTION**

This section evaluates the potential impacts of noise resulting from the implementation of the proposed North Roseville Specific Plan. Where appropriate, mitigation measures are suggested that would minimize or eliminate potential significant noise impacts.

Both Phase I and the Full Project (Phases I and II combined) are evaluated using a worst case scenario Year 2010 conditions as the baseline scenario. Noise impacts evaluated against existing conditions are contained in Appendix D.

### **4.11.2 ENVIRONMENTAL SETTING**

The environmental backdrop for noise is presented with discussions on acoustic fundamentals, characteristics of sound propagation and attenuation, and human response to environmental noise. In addition, the existing noise sources, the measured noise levels, and the existing noise sensitive receptors in the Plan Area are addressed.

#### **Acoustic Fundamentals**

Noise is often defined as unwanted sound. Sound is a mechanical form of radiant energy transmitted by pressure waves in the air. It is characterized by two parameters: amplitude (loudness) and frequency (tone).

Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic rather than a linear scale. As a consequence, the pressure difference in a 10 dB sound is 10 times that of a 0 dB sound, a 20 dB sound is 100 times the pressure difference of a 0 dB sound, and so on. Another feature of the decibel scale is the way in which sound amplitudes from multiple sources add. A 65 dB point source of sound, say a truck, when joined by another similar source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3 dB change in amplitude as the minimum audible difference for the average person.<sup>1</sup>

Frequency is the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (abbreviated Hz; one Hz equals one cycle per second). The human ear is not equally sensitive to sound of different frequencies. Sound waves below 16 Hz or above 20,000 Hz cannot be heard at all, and the ear is more sensitive to sound in the higher portion of this range



than in the lower. To approximate this sensitivity, environmental sound is usually measured in A-weighted decibels (dBA). On this scale, the normal range of human hearing extends from about 0 dBA to about 140 dBA. Listed in Table 4.11-1 are several examples of the noise levels associated with common situations.

The intensity of environmental noise fluctuates over time, and several descriptors of time-averaged noise levels are used. Three most commonly used are  $L_{eq}$ ,  $L_{dn}$ , and CNEL. The energy equivalent noise level,  $L_{eq}$ , is a measure of the average energy content (intensity) of noise over any given period of time. Many communities use 24-hour descriptors of noise levels to regulate noise. The day-night average noise level,  $L_{dn}$ , is the 24-hour average of the noise intensity, with a 10 dBA "penalty" added for nighttime noise (10:00 p.m. to 7:00 a.m.) to account for the greater sensitivity to noise during this period.<sup>2</sup> CNEL, the community equivalent noise level, is similar to  $L_{dn}$ , but adds a 5 dBA penalty to evening noise (7:00 a.m. to 10:00 p.m.).

### **Characteristics of Sound Propagation and Attenuation**

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources such as construction sites, machinery, industrial operations. Noise generated by mobile sources typically attenuates at a rate between 3.0 to 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number of objects between the noise source and the receiver. Hard and flat surfaces such as concrete or asphalt have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces such as uneven or vegetated terrain have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6.0 to about 7.5 dBA per doubling of distance.

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the line of sight between the source and the receiver. Buildings, walls, berms, and dense foliage can all act as noise barriers. Buildings, concrete walls, and berms are a great deal more effective at reducing noise levels than wooden walls or dense foliage.

### **Human Response to Noise**

The human response to environmental noise, such as planes, trains and automobiles, is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities such as sleep, speech, recreation, tasks demanding concentration or coordination, and at the highest intensity levels, hearing loss. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases, and the acceptability and the threat to public well-being are the basis for land use planning policies preventing exposure to excessive community noise levels. Table 4.11-2 has a summary of the public health effects of community noise and the noise levels at which they can occur.

TABLE 4.11-1

**TYPICAL SOUND LEVELS  
MEASURED IN THE ENVIRONMENT AND INDUSTRY**

| At a Given Distance<br>From Noise Source       | A-Weighted<br>Sound Level<br>in Decibels | Noise Environments                             | Subjective<br>Impression |
|------------------------------------------------|------------------------------------------|------------------------------------------------|--------------------------|
|                                                | 140                                      |                                                |                          |
| Civil Defense Siren (100')                     | 130                                      |                                                |                          |
| Jet Takeoff (200')                             | 120                                      |                                                | Pain Threshold           |
|                                                | 110                                      | Rock Music Concert                             |                          |
| Pile Driver (50')                              | 100                                      |                                                | Very Loud                |
| Ambulance Siren (100')                         |                                          |                                                |                          |
|                                                | 90                                       | Boiler Room                                    |                          |
| Freight Cars (50')                             |                                          | Printing Press Plant                           |                          |
| Pneumatic Drill (50')                          | 80                                       | In Kitchen With<br>Garbage Disposal<br>Running |                          |
| Freeway (100')                                 |                                          |                                                |                          |
|                                                | 70                                       |                                                | Moderately Loud          |
| Vacuum Cleaner (10')                           | 60                                       | Data Processing<br>Center                      |                          |
| Department Store                               |                                          |                                                |                          |
| Light Traffic (100')                           | 50                                       | Private Business<br>Office                     |                          |
| Large Transformer (200')                       |                                          |                                                |                          |
|                                                | 40                                       |                                                | Quiet                    |
| Soft Whisper (5')                              | 30                                       | Quiet Bedroom                                  |                          |
|                                                | 20                                       | Recording Studio                               |                          |
|                                                | 10                                       |                                                | Threshold of Hearing     |
|                                                | 0                                        |                                                |                          |
| SOURCE: Arnold Peterson and Ervin Gross, 1963. |                                          |                                                |                          |

TABLE 4.11-2

**SUMMARY OF THE PUBLIC HEALTH EFFECTS OF COMMUNITY NOISE AND THE NOISE LEVELS AT WHICH THEY CAN OCCUR**

| Effect                                                                                                                                                                                                                                                                | Level                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| I. Noise as a Stressor<br>Increase incidence of high blood pressure that leads to increased risk of cardiovascular disease<br>Vasoconstriction begins that can lead to high blood pressure                                                                            | 85 dBA<br>(long term)<br>70 dBA                         |
| II. Adverse Effect on Task Performance<br>Steady noise<br>Irregular noise                                                                                                                                                                                             | 90 dBA<br>All levels                                    |
| III. Prenatal and Childhood Effects<br>Increased incidence of low birth weight<br>High frequency hearing loss in fetuses<br>Increased blood pressure in children<br>Decreased reading ability, auditory discrimination or language development                        | 70 dBA<br>85 dBA<br>75 dBA<br>65 dBA<br>(all long term) |
| IV. Social Behavior and Mental Health<br>Decreased helpfulness and social interaction<br>Increased incidence of mental disorders                                                                                                                                      | 80 dBA<br>90 dBA                                        |
| V. Sleep Disturbance                                                                                                                                                                                                                                                  | 35 dBA                                                  |
| VI. Speech Interference<br>Less than 5 feet between conversants<br>5 to 12 feet between conversants<br>Over 12 feet between conversants                                                                                                                               | 65 dBA<br>60 dBA<br>55 dBA                              |
| VII. Recreational Hearing Loss                                                                                                                                                                                                                                        | 85 dBA<br>(long term)                                   |
| SOURCE: "The Public Health Effects of Community Noise" by Carol S. Pennenga and Raymond M. Manganelli. Rutgers University, New Brunswick, New Jersey. Presented at the 81st Annual Meeting of the Air Pollution Control Association, Dallas, Texas, June 19-24, 1988. |                                                         |



## **Existing Noise Sources**

The major noise source contributing to the existing environment is motor vehicle traffic. Adjacent to several edges of the Plan Area are many major arterial roadways such as Fiddymment Road, Baseline Road, Pleasant Grove Boulevard, and Foothill Boulevard. Existing  $L_{dn}$  noise levels were calculated using an implementation of the FHWA's traffic noise model for 15 roadway links, three of which were adjacent to the Plan Area. The traffic data were taken from information provided by DKS Associates. Discussion of the model assumptions appear in Section 4.11.4. Table 4.11-3 presents the  $L_{dn}$ 's at 50 and 100 feet from the centerlines of the modeled roadway segments and the maximum distances from the centerline at which  $L_{dn}$ 's of 70, 65 and 60 dBA would be experienced.

Modeling indicates that, among the analyzed roadway segments, the highest  $L_{dn}$ 's are experienced along Baseline Road between Fiddymment Road and Country Club Drive, Pleasant Grove Boulevard between Woodcreek Oaks Boulevard and Foothills Boulevard, Blue Oaks Boulevard between Foothills and Industrial Avenue and Foothills south of Blue Oaks. Along these segments, projected  $L_{dn}$ 's at 50 feet range from about 67 to 71 dBA and at 100 feet range from about 62 to 67 dBA. Under worst case noise exposure conditions, noise levels of 60 dBA or higher could be experienced as far as 140 to 290 feet from the centerlines of these roadways. However, existing structures and topography probably result in a lesser extent of noise exposure along most of the total length of these segments.

The lowest modeled existing noise levels among the analyzed roadway segments occur along Junction Boulevard between Woodcreek Oaks and Country Club, Blue Oaks between Woodcreek Oaks and Foothills, and Fiddymment north of Blue Oaks and between Pleasant Grove and PFE Road. Along these segments, projected  $L_{dn}$ 's at 50 feet range from about 55-60 dBA and at 100 feet range from about 50-55 dBA. While the maximum distance at which noise levels of 60 dBA or higher could be experienced is 50 feet, the least traveled of these roadway segments would not generate such levels beyond the roadway pavement.

Railroad noise in the Plan Area is negligible and is generated by the Union Pacific (formerly Southern pacific) Railroad, which is approximately one and one half miles east of the eastern edge of the Plan Area. The Plan Area is also exposed to minor industrial, aircraft, agricultural and residential noise. Aircraft noise is generated by aircraft traveling to and from McClellan Air Force Base, Lincoln Municipal Airport, and other airports in the vicinity. No airport 60 dBA noise contour extends within the Plan Area. Portions of the Plan Area are adjacent to properties to the north and west which are used for grazing. Minor noise is produced by farm equipment and animals.

## **Neighborhoods A and B (Phase I)**

The two stationary noise sources with the greatest influence on the Phase I Plan Area are the Pleasant Grove Peak Wastewater Pump Station and the North Roseville Peaking Facility. The Pump Station is located near the eastern edge of the Diamond Creek property. This facility includes five submerged pumps which siphon sewage from an adjacent reservoir to three above-ground pumps that are enclosed in a building structure. These above-ground pumps, in turn, pump

TABLE 4.11-3

**MODELED EXISTING  $L_{dn}$ 'S AT  
RECEPTORS 50 AND 100 FEET FROM ROADWAY CENTERLINES  
AND DISTANCES TO SELECTED  $L_{dn}$  CONTOURS**

| Locations |                |                             | $L_{dn}$ (dBA) |      | Distance to Contour |        |        |
|-----------|----------------|-----------------------------|----------------|------|---------------------|--------|--------|
| #         | Roadway        | Segment                     | 50'            | 100' | 70 dBA              | 65 dBA | 60 dBA |
| 1-2       | Baseline       | Fiddymment/Woodcreek Oaks   | 68             | 63   | 30'                 | 75'    | 160'   |
| 3         |                | Woodcreek Oaks/Country Club | 70             | 65   | 50'                 | 105'   | 230'   |
| 5         | Junction       | Woodcreek Oaks/Country Club | 59             | 55   | *                   | *      | 45'    |
| 6         |                | Country Club/Foothills      | 65             | 61   | *                   | 55'    | 115'   |
| 7         | Pleasant Grove | Fiddymment/Woodcreek Oaks   | 64             | 60   | *                   | 45'    | 100'   |
| 8         |                | Woodcreek Oaks/Country Club | 67             | 62   | *                   | 70'    | 140'   |
| 9         |                | Country Club/Foothills      | 67             | 63   | *                   | 75'    | 155'   |
| 13        | Blue Oaks      | Woodcreek Oaks/Foothills    | 60             | 55   | *                   | 15'    | 50'    |
| 14        |                | Foothills/Industrial        | 71             | 67   | 65'                 | 135'   | 290'   |
| 15        | Foothills      | S:Blue Oaks                 | 69             | 65   | 45'                 | 95'    | 200'   |
| 19        | Woodcreek Oaks | N:Pleasant Grove            | 64             | 59   | *                   | 40'    | 90'    |
| 20        |                | Pleasant Grove/Junction     | 64             | 60   | *                   | 45'    | 100'   |
| 21        | Fiddymment     | N:Blue Oaks                 | 58             | 53   | *                   | *      | 30'    |
|           |                | Pleasant Grove/Baseline     | 55             | 50   | *                   | *      | *      |
| 22        |                | Baseline/PFE                | 59             | 54   | *                   | *      | 40'    |

NA = Noise contour either does not exist or is within the roadway right-of-way.

SOURCE: EIP Associates, 1996.

sewage towards the treatment plant. At least one of the pumps operates intermittently throughout the day; additional pumps are activated under high sewage system loads. An on-site diesel-powered emergency electrical generator is located outside the main pump building. The generator is currently tested every Thursday at about 8:30 a.m. for a duration of about 20 minutes. Electrical contractors operate the generator for about one hour during the day about once per month. Contract maintenance staff operate the generator for about 20 minutes during the day about once every three months.

The Roseville Area Peaking Facility is approximately one-third mile to the west of the northern border of Neighborhood A (Diamond Creek). This facility generates electrical power during periods of peak demand, typically from about 12 to 7 p.m. on hot summer days when air conditioning usage is highest. The generator turbines are also typically tested for about one hour between 10 a.m. and 12 p.m. about once per month.

The County landfill is located approximately one mile from the northern boundary of the Plan Area. While landfills typically employ large earthmoving equipment, little, if any, noise from such machinery could be heard at a distance of one mile. During site reconnaissance of the Plan Area, no noise from the landfill was heard.

### **Neighborhoods C and D (Phase II)**

The only existing non-roadway noise sources affecting the Phase II sites are agricultural activities north and west of the Mourier 160 property and miscellaneous activities in the residential areas south and east of the Woodcreek West property.

### **Potential Future Noise Sources**

#### Bill Graham Presents Amphitheater

Although the project has not been approved, Placer County has received a request for an amphitheater, and a Draft EIR for this project was released for public and agency review on March 24, 1997. The amphitheater would be located approximately one mile north of the Diamond Creek property (Neighborhood A).

The proposed Bill Graham Presents (BGP) Amphitheater project, which would encompass approximately 20 acres of the 113-acre project site, would include fixed seating for 10,000 persons and a rear lawn area with space for an additional 13,000 persons. The amphitheater would include a stage house, a mixing booth, speaker bays and towers, and video screens. Concession buildings, restrooms, a ticket office, and open lawn picnic areas would also be provided within the amphitheater. The remaining 93 acres within the project site would be used for parking, landscaping, and project roadways. Eight parking lots are proposed that would provide a total of 7,761 parking spaces.

The DEIR for the amphitheater includes a noise analysis for the project. According to the Draft EIR prepared for the amphitheater, which was circulated for public and agency review beginning May 24, 1997, a variety of measures have been incorporated as mitigation to minimize the extent



to which noise can be heard in the surrounding area. Based on acoustical noise studies prepared for the amphitheater Draft EIR, the amphitheater would normally not cause noise levels within the City's boundaries (including the Plan Area) to exceed the City's stationary source, nighttime noise standard of 45 Leq. The Draft EIR indicates that, in some cases, inversion layers could result in noise levels exceeding the nighttime standard by as much as three dBA. However, these violations are expected to be rare.

### **Sensitive Receptors**

Noise-sensitive land uses that have been built or are under construction in the vicinity of the Plan Area include several new and on-going residential developments north and south of Pleasant Grove Boulevard, and established residential areas further south. The new homes along Pleasant Grove Boulevard are one and two stories in height. Most homes in established neighborhoods farther to the south are single-family, although multi-family residential developments with upper-story units are also present.

### **Noise Exposure Circumstances**

Most of the land in the project vicinity is relatively flat, although some subtle but important local variations in topography occur. Virtually all of the new residential units along Pleasant Grove Boulevard are protected from roadway traffic by noise walls. Some of the walls are supplemented by raised berms at their base, while other walls are enhanced in many cases by the lower elevation of residences that have been built behind them.

### **Measured Noise Levels**

#### **On-Site**

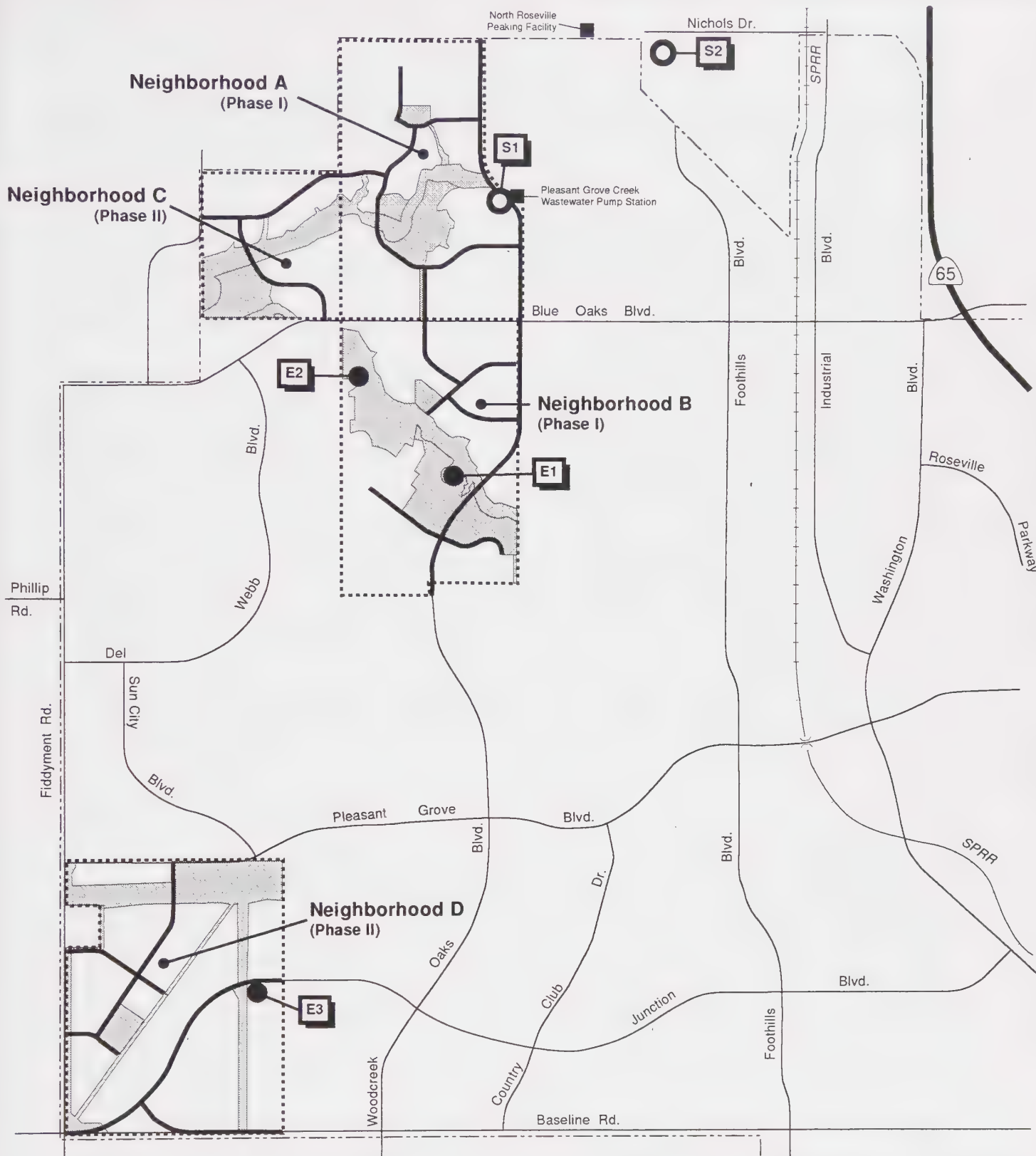
Noise levels were measured at three on-site locations. These locations (E1, E2, and E3) are presented in Figure 4.11-1. The measurements were taken with Quest Electronics M-28 Noise Logging Dosimeters. The meters were calibrated before and checked after with a Quest Model CA-12B Sound Calibrator.

#### **Phase I Sites**

Measurement E1 was taken in a proposed park/recreational area located near the Pleasant Grove Creek South Branch along the middle of the northeast edge of the Woodcreek North property on April 25, 1995, starting at 12:15 P.M. This two-minute measurement resulted in an  $L_{eq}$  of 47.6. Measurement E2 was taken on April 25, 1995, starting at 12:47 P.M. in a proposed open space area located near the south branch of Pleasant Grove Creek at the northern portion of the Woodcreek North property. This five-minute measurement resulted in an  $L_{eq}$  of 48.2.

#### **Phase II Sites**

Measurement E3 was taken in a proposed low-density residential area located near the middle of the eastern edge of the Woodcreek West property near the proposed Junction Boulevard



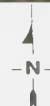
- ..... Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Proposed Roads
- E1** Ambient Noise Monitoring Locations
- S1** Source-Based Noise Monitoring Locations
- Open Space

SOURCE: EIP Associates, May 1997.

**Figure 4.11-1**

## Noise Monitoring Locations

0 1/4 1/2  
Scale In Miles



96063  
Base







alignment. This five-minute measurement (taken on April 25, 1995, starting at 11:20 A.M.) resulted in an  $L_{eq}$  of 48.2.

### **Source-Based**

The following measurements were recorded on November 14, 1996, with a Larson-Davis Model 700 integrating sound level meter, calibrated with a Larson-Davis CA250 calibrator.

#### Pleasant Grove Creek Wastewater Pump Station

The Pleasant Grove Creek Wastewater Pump Station was visited to subjectively observe and measure noise levels from sources associated with this facility.  $L_{eq}$ 's were recorded at one minute intervals during operation of both the emergency power generator and the above-ground pumps. While the generator was operating (and the pumps remained inactive), an  $L_{eq}$  of 66 dBA and an  $L_{max}$  of 67 dBA were measured at a distance of about 200 feet to the west of the source. After the generator was powered off, the pumps were activated sequentially, then deactivated sequentially. One-minute  $L_{eq}$ 's during pump operation ranged from about 42 to 46 dBA, with the highest levels occurring during intervals when the electric motor for an additional pump was activated or the frequency of that motor was altered. Maximum levels during these one-minute intervals ranged from about 44 to 50 dBA, with the highest levels typically occurring when the west-facing door of the pump station building was opened.

While measured noise levels were relatively low, the subjective characteristics of the noise -- alternating clunking, whirring and whining with irregular variations in pitch -- could increase its potential for disturbance.

#### North Roseville Peaking Facility

Noise generated by the North Roseville Peaking Facility's two turbines was measured during a special scheduling of the monthly tests conducted at the facility. At a distance of about 1500 feet, one-minute  $L_{eq}$ 's ranged from about 53 to 59 dBA. (Only data from measurement intervals where the Peaking Facility was the dominant source of noise were retained.) Measured peak noise levels ranged from about 55 to 60 dBA. The measurement location was east of the facility, and the downwind conditions could have enhanced sound propagation, potentially resulting in levels at least five dBA higher than those that would be experienced under calm conditions.

### **4.11.3 REGULATORY SETTING**

Responsibility for noise control varies among federal, State, and local levels of government depending on the type of source. Federal and State regulations mitigate transportation noise impacts on adjacent and nearby residential areas. Local jurisdictions have the responsibility for determining what land uses are suitable in a given noise environment.

#### Federal

While there are federal regulations relating to transportation noise sources, they do not have a direct bearing on the analysis of noise impacts from this project.

### **State of California**

In order to limit population exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. The California Department of Health Services' (DHS) Office of Noise Control studied the correlation of noise levels and their effects on different land uses. As a result of this study, a graphic relating land use types to compatible noise environments was developed. This relationship has served as the basis for standards and guidelines promulgated by many local jurisdictions in their general plans.

Title 24 of the California Code of Regulations establishes standards governing interior noise levels that apply to all new multifamily residential units in California. These standards require that acoustical studies be performed prior to construction at building locations where the existing  $L_{dn}$  exceeds 60 dBA. Such acoustical studies are required to establish mitigation measures that will limit maximum  $L_{dn}$  levels to 45 dBA in any inhabitable room. Although there are no generally applicable interior noise standards pertinent to all uses, many communities in California have adopted an  $L_{dn}$  of 45 as an upper limit on interior noise in all residential units. The U.S. Department of Housing and Urban Development (HUD) has set an  $L_{dn}$  of 45 as its goal for interior noise in residential units built with HUD funding. Standard residential construction for single-family units typically attenuate noise by 20 decibels; therefore, the exterior  $L_{dn}$  should not exceed 65 in order for the California interior standards to be met.

### **City of Roseville**

The Noise Element of the Roseville General Plan contains two noise goals to protect residents from health hazards and annoyance associated with excessive noise levels and to protect the economic base from incompatible land uses (see Appendix C for policies). These two goals are executed through the application of ten policies for transportation and fixed-noise sources, and through the execution of general noise policies. Specifically, the noise transportation policies set maximum noise level exposure for different land uses (see Table 4.11-4). Fixed noise source policies also set maximum noise levels for non-transportation noise sources (see Table 4.11-5).

Each of the noise levels specified above should be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying, and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.

The City of Roseville has a Municipal Code of Ordinances that initiates noise standards for construction noise on public property. The Roseville Noise Ordinance limits construction activity

TABLE 4.11-4

**MAXIMUM ALLOWABLE NOISE EXPOSURE  
TRANSPORTATION NOISE SOURCES**

| Land Uses                          | Outdoor Activity Areas <sup>1</sup> $L_{dn}$ /CNEL, dB | Interior Spaces    |                            |
|------------------------------------|--------------------------------------------------------|--------------------|----------------------------|
|                                    |                                                        | $L_{dn}$ /CNEL, dB | $L_{eq}$ , dB <sup>2</sup> |
| Residential                        | 60 <sup>3</sup>                                        | 45                 | —                          |
| Transient Lodging                  | 60 <sup>3</sup>                                        | 45                 | —                          |
| Hospitals, Nursing Homes           | 60 <sup>3</sup>                                        | 45                 | —                          |
| Theaters, Auditoriums, Music Halls | —                                                      | —                  | 35                         |
| Churches, Meeting Halls            | 60 <sup>3</sup>                                        | —                  | 40                         |
| Office Buildings                   | 65                                                     | —                  | 45                         |
| Schools, Libraries, Museums        | —                                                      | —                  | 45                         |
| Playgrounds, Neighborhood Parks    | 70                                                     | —                  | —                          |

<sup>1</sup> Outdoor activity areas for residential developments are considered to be the backyard patios or decks of single family dwellings, and the patios or common areas where people generally congregate for multi-family developments. Outdoor activity areas for non-residential developments are considered to be those common areas where people generally congregate, including pedestrian plazas, seating areas and outside lunch facilities.

Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

<sup>2</sup> As determined for a typical worst-case hour during periods of use.

<sup>3</sup> Where it is not possible to reduce noise in outdoor activity areas to 60 dB  $L_{dn}$ /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB  $L_{dn}$ /CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

NOTE: Where a proposed use is not specifically listed on this table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the Planning Department. Commercial and industrial uses have not been listed because such uses are not considered to be particularly sensitive to noise exposure.



to between 7:00 a.m. to 7:00 p.m. weekdays and between 8:00 a.m. to 8:00 p.m. on weekends. The ordinance also limits noise from an individual piece of equipment to 83 dBA at 25 feet and all construction noise to 86 dBA outside of the property site.

**TABLE 4.11-5**

**PERFORMANCE STANDARDS FOR  
NON-TRANSPORTATION NOISE SOURCES OR PROJECTS AFFECTED  
BY NON-TRANSPORTATION NOISE SOURCES  
(As Measured at the Property Line of Noise Sensitive Uses)**

| Noise Level Descriptor                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Daytime<br>(7 A.M. to 10 P.M.) | Nighttime<br>(10 P.M. to 7 A.M.) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------|
| Hourly $L_{eq}$ , dB                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50                             | 45                               |
| Maximum level, dB                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 70                             | 65                               |
| Each of the noise levels specified above should be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying, and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). |                                |                                  |
| No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.                                                                                                                                                                                                                                                                              |                                |                                  |

#### 4.11.4 IMPACTS

Since ultimate noise levels would be dependant both upon project-generated motor vehicle trips and cumulative trips, and since it is expected that development within the Plan Area would proceed over several years, a 2010 Market condition, rather than the existing condition, is used as the baseline scenario for traffic noise analysis. An Existing plus Project analysis is presented in Appendix D.

#### Method of Analysis

A spreadsheet implementation of the Federal Highway Administration's Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to calculate noise levels and contour distances along 19 existing, 28 Year 2010 No Project, 31 Year 2010 Plus Phase I and 32 Year 2010 Plus Full Project roadway segments. Average Daily Traffic (ADT) volume data provided by the transportation consultant, DKS Associates, were used for the calculation of vehicle volumes for modeling runs. As noted in Section 4.9, Transportation and Circulation, the traffic modelling was conducted for a previous version of the Proposed Project, which had a higher number of dwelling units. Therefore, modelled traffic, and therefore noise, estimates could be overstated by as much as three percent. This slight variation is not sufficient to change the conclusions of the noise analysis.

For base conditions, the proportions of total daily traffic occurring during daytime and nighttime hours were estimated based upon existing traffic counts along representative roadway segments. The proportions of NRSP traffic occurring during daytime and nighttime hours were estimated

based upon entry/exit counts for a comparable mix of land uses, obtained from studies conducted by Caltrans District 4. The assumed mix of cars, medium trucks and heavy trucks for base conditions was based upon common assumptions and previous data collected for similar roadway networks. Posted speed limits were applied. For modeling, a simplified flat terrain with a soft surface (4.5 decibel reduction per doubling of distance) was used.

Modeled  $L_{dn}$ 's at reference receptors 50 and 100 feet from the roadway centerlines were used to evaluate the potential significance of project-related increases in traffic noise levels. The distance to selected  $L_{dn}$  contours was used to establish the maximum geographic extent of traffic noise impacts and how great the setbacks would need to be in order to achieve the City's noise standards.

Typical noise levels for a common construction site were estimated from several types of heavy duty mobile and stationary construction equipment with the assistance of the highway construction noise computer model HICNOM, which is a FHWA-sponsored model. For this analysis, noise levels from one tractor, one grader, one loader, one backhoe and one truck from Table 4.11-6 levels were assumed.

### **Standards of Significance**

Noise impacts will be considered significant if:

- The Proposed Project would generate an increase in traffic noise levels of greater than three dBA (which is the lowest change in noise levels audible to the human ear) and has the potential to cause or contribute to noise levels at existing or approved land uses exceeding the City standards summarized in Table 4.11-4.
- The Proposed Project would introduce land uses into areas where transportation noise exceeds the maximum allowable levels indicated in Table 4.11-4.
- The Proposed Project would introduce land uses into areas where non-transportation-source noise exceeds the maximum allowable levels indicated in Table 4.11-5.
- Noise-generating project construction activities would occur outside the allowable City of Roseville Noise Ordinance hours of 7:00 a.m. to 7:00 p.m. weekdays and 8:00 a.m. to 8:00 p.m. weekends.

### **PHASE I**

#### **IMPACT 4.11-1(A):**

SIGNIFICANCE:

MITIGATION MEASURE:

RESIDUAL SIGNIFICANCE:

**Temporary increases in noise levels due to earthmoving and general construction activities.**

Significant (short-term)

None available

Significant (short-term)

**TABLE 4.11-6**  
**CONSTRUCTION EQUIPMENT NOISE LEVELS<sup>1</sup>**  
**BEFORE AND AFTER MITIGATION (dBA)**

| Equipment Type            | Noise Level at 50 Feet |                                          |
|---------------------------|------------------------|------------------------------------------|
|                           | Without Noise Control  | With Feasible Noise Control <sup>2</sup> |
| <b>Earthmoving</b>        |                        |                                          |
| Front Loaders             | 79                     | 75                                       |
| Backhoes                  | 85                     | 75                                       |
| Dozers                    | 80                     | 75                                       |
| Tractors                  | 80                     | 75                                       |
| Scrapers                  | 88                     | 80                                       |
| Graders                   | 85                     | 75                                       |
| Trucks                    | 91                     | 75                                       |
| Pavers                    | 89                     | 80                                       |
| <b>Materials Handling</b> |                        |                                          |
| Concrete Mixers           | 85                     | 75                                       |
| Concrete Pumps            | 82                     | 75                                       |
| Cranes                    | 83                     | 75                                       |
| Derricks                  | 88                     | 75                                       |
| <b>Stationary</b>         |                        |                                          |
| Pumps                     | 76                     | 75                                       |
| Generators                | 78                     | 75                                       |
| Compressors               | 81                     | 75                                       |
| <b>Impact</b>             |                        |                                          |
| Pile Drivers              | 101                    | 95                                       |
| Jack Hammers              | 88                     | 75                                       |
| Rock Drills               | 98                     | 80                                       |
| Pneumatic Tools           | 86                     | 80                                       |
| <b>Other</b>              |                        |                                          |
| Saws                      | 78                     | 75                                       |
| Vibrators                 | 76                     | 75                                       |

<sup>1</sup> Taken from Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, prepared by Bolt, Beranek, and Newman for the U.S. Environmental Protection Agency, December 31, 1971.

<sup>2</sup> Estimated levels obtainable by selecting quieter procedures or machines and implementing noise control features requiring no major redesign or extreme cost.



Construction activities would temporarily increase noise levels in the vicinity of Phase I. Earthmoving, materials handling, stationary and impact equipment, and vehicles would generate noise during clearing, excavation, grading, general building, roadway, and pipeline construction related to residential, commercial, business, electrical substation, and recreational areas associated with Phase I. Construction vehicle traffic traveling to the area would also generate noise. It is anticipated that construction traffic would access the Plan Area from several major roadways such as Blue Oaks Boulevard, Fiddymont Road and Woodcreek Oaks Boulevard.

These activities could disturb residents of existing adjacent homes, future homes adjacent to the Plan Area, and future planned residential and commercial uses within the Plan Area. Potentially vulnerable off-site residences would include those along the eastern edge of the Del Webb Sun City Roseville development and the northern edge of existing development near Woodcreek Golf Club. Project residential and commercial land uses would be affected as subsequent portions of the project are constructed.

Actual noise levels experienced at residences would be influenced by several different kinds of equipment. Since the number, type and location of each kind of equipment that will be used is not known, it is not possible to precisely predict the noise level at nearby residences. Nevertheless, generalized noise level estimates were made assuming one tractor, one grader, one loader, one backhoe and one truck all operating at the same time without feasible noise control and within an area of 28,600 square feet. The model HICNOM was used in the area source mode and noise levels were calculated for four locations, 10, 50, 100 and 500 feet from the construction area. Calculated worst-case temporary noise levels of 90 dBA could be expected for receptors 10 feet from the construction area, 86 dBA for receptors 50 feet from the construction area, 83 dBA for receptors 100 feet from the construction area, and 72 dBA for receptors 500 feet from the construction area. This is assuming that there is direct line-of-sight between the noise sources and the exterior receptor. Noise levels for receptors inside buildings with the windows closed would be about 20 dBA lower. The City's Noise Ordinance does not allow construction noise to exceed 86 dBA outside the property lines. Because construction could occur within fifty feet of the Plan Area boundaries, the Proposed Project could exceed the limits set forth in the Noise Ordinance. The violation would be short-term, and no mitigation would be available. Therefore, construction noise is considered a short-term, significant impact.

**IMPACT 4.11-2(A):**

**Traffic noise level increases along roadways near off-site residential areas.**

**SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None Required

Development of Phase I would result in additional motor vehicle traffic on several roadways in the project vicinity; therefore, traffic noise levels would increase along these roadways as well. Table 4.11-7 presents modeled worst-case (no sound barriers) noise levels at reference distances 50 and 100 feet from the centerlines of 32 roadway segments under 2010 Market baseline conditions. Not all road segments in the City were analyzed. Those segments that would experience only minimal increases in trips (e.g., 100 trips per day) were not analyzed because such low increases in trip volume do not have measurable effects on noise.

TABLE 4.11-7

**L<sub>dn</sub> AT RECEPTORS 50 AND 100 FEET FROM ROADWAY CENTERLINES (dBA)**

| Locations |                              |                            | L <sub>dn</sub> at Reference Distances (2010 Market) |        |      |            |        |      | Δ re: No Project |      |
|-----------|------------------------------|----------------------------|------------------------------------------------------|--------|------|------------|--------|------|------------------|------|
| #         | Roadway                      | Segment                    | 50'                                                  |        |      | 100'       |        |      |                  |      |
|           |                              |                            | No Project                                           | Phases |      | No Project | Phases |      | Phases           |      |
|           |                              |                            |                                                      | I      | I+II |            | I      | I+II | I                | I+II |
| 1         | Baseline                     | Fiddymment/Junction        | 73                                                   | 73     | 73   | 69         | 69     | 69   | 0                | 0    |
| 2         |                              | Junction/Woodcreek Oaks    | 71                                                   | 71     | 72   | 67         | 67     | 68   | 0                | 1    |
| 3         |                              | Woodcreek Oaks/Country     | 71                                                   | 71     | 72   | 66         | 66     | 67   | 0                | 1    |
| 4         | Junction                     | Baseline/Woodcreek Oaks    | 68                                                   | 68     | 69   | 64         | 64     | 65   | 0                | 1    |
| 5         |                              | Woodcreek Oaks/Country     | 65                                                   | 65     | 67   | 60         | 60     | 62   | 0                | 2    |
| 6         |                              | Country Club/Foothills     | 66                                                   | 67     | 68   | 61         | 62     | 63   | 1                | 2    |
| 7         | Pleasant Grove               | Fiddymment/Woodcreek       | 68                                                   | 68     | 69   | 64         | 64     | 65   | 0                | 1    |
| 8         |                              | Woodcreek Oaks/Country     | 73                                                   | 73     | 74   | 68         | 68     | 69   | 0                | 1    |
| 9         |                              | Country Club/Foothills     | 73                                                   | 73     | 74   | 69         | 69     | 70   | 0                | 1    |
| 10        | Blue Oaks                    | Fiddymment S/Fiddymment N  | 66                                                   | 66     | 67   | 62         | 62     | 63   | 0                | 1    |
| 11        |                              | Fiddymment N/Project       | 67                                                   | 68     | 69   | 63         | 64     | 65   | 1                | 2    |
| 12        |                              | Project                    | *                                                    | 69     | 71   | *          | 64     | 66   | *                | *    |
| 13        |                              | Woodcreek Oaks/Foothills   | 70                                                   | 73     | 73   | 66         | 69     | 69   | 3                | 3    |
| 14        |                              | Foothills/Industrial       | 74                                                   | 75     | 75   | 69         | 70     | 70   | 1                | 1    |
| 15        | Washington                   | Blue Oaks/Roseville Pkwy.  | 72                                                   | 72     | 72   | 68         | 68     | 68   | 0                | 0    |
| 16        |                              | Roseville Pkwy./Industrial | 71                                                   | 71     | 71   | 66         | 66     | 66   | 0                | 0    |
| 17        |                              | Industrial/Junction        | 73                                                   | 73     | 73   | 68         | 68     | 68   | 0                | 0    |
| 18        | Foothills                    | Blue Oaks/Roseville Pkwy.  | 71                                                   | 72     | 72   | 67         | 68     | 68   | 1                | 1    |
| 19        |                              | Roseville Pkwy./Pleasant   | 73                                                   | 73     | 73   | 68         | 68     | 68   | 0                | 0    |
| 20        |                              | Pleasant Grove/Junction    | 76                                                   | 76     | 76   | 71         | 71     | 71   | 0                | 0    |
| 21        |                              | Junction/Baseline          | 76                                                   | 76     | 76   | 71         | 71     | 71   | 0                | 0    |
| 22        | Woodcreek Oaks               | N:Blue Oaks                | *                                                    | 67     | 67   | *          | 62     | 62   | *                | *    |
| 23        |                              | S:Blue Oaks                | 65                                                   | 69     | 69   | 61         | 65     | 65   | 4                | 4    |
| 24        |                              | Blue Oaks/Pleasant Grove   | 65                                                   | 68     | 68   | 61         | 64     | 64   | 3                | 3    |
| 25        |                              | N:Pleasant Grove           | 66                                                   | 68     | 69   | 62         | 64     | 65   | 2                | 3    |
| 26        |                              | Pleasant Grove/Junction    | 71                                                   | 71     | 72   | 67         | 67     | 68   | 0                | 1    |
| 27        | Fiddymment                   | N:Blue Oaks                | 63                                                   | 63     | 65   | 58         | 58     | 60   | 0                | 2    |
| 28        |                              | Blue Oaks/Pleasant Grove   | 68                                                   | 68     | 69   | 63         | 63     | 64   | 0                | 1    |
| 29        |                              | Pleasant Grove/Baseline    | 68                                                   | 68     | 69   | 64         | 64     | 65   | 0                | 1    |
| 30        |                              | Baseline/PFE               | 68                                                   | 68     | 69   | 64         | 64     | 65   | 0                | 1    |
| 31        | S Entrance Diamond Creek     |                            | *                                                    | 64     | 65   | *          | 59     | 60   | *                | *    |
| 32        | SW Entrance Woodcreek Oaks W |                            | *                                                    | *      | 60   | *          | *      | 55   | *                | *    |

\* Roadway segment does not exist under this scenario.  
SOURCE: EIP Associates, 1997.



The traffic noise predictions shown in Table 4.11-7 represent screening level estimates; that is, these estimates reflect sound levels very close to the roadway (50 feet and 100 feet from the centerline), and do not take into account attenuation from existing walls or barriers that border many roadways in Roseville. Actual sound levels at many residential locations may be up to five, or in some cases, up to ten decibels lower than those values presented in Table 4.11-7 and may fall below 60 dBA,  $L_{dn}$ . Predicted sound levels in Table 4.11-7 do show, however, the maximum potential change in sound levels along affected roadways.

Three scenarios are considered, all for the Year 2010; No Project, Phase I, and Full Project (Full Project is discussed under Impact 4.11-2(B)). Nineteen of the 32 roadway segments would exist under No Project conditions and 28 of the 32 segments would exist under Phase I conditions.

Table 4.11-8 presents modeled noise contour distances under 2010 Market conditions. These values represent the maximum distance from the centerlines of the indicated roadway segments at which noise exposure equal to or greater than the indicated levels might be experienced. Contour distances for 70 dBA, 65 dBA and 60 dBA levels are indicated for both Phase I and Full Project scenarios.

Along 21 of the 28 segments modeled under No Project conditions, development of Phase I would result in only negligible increases in noise levels. Of the remaining seven segments, six would experience increases of three dBA or less. Only Woodcreek Oaks south of Blue Oaks would experience an increase of more than three dBA with the addition of Phase I traffic. However, there are no existing noise-sensitive land uses along this segment of Woodcreek Oaks; in fact, this segment of Woodcreek Oaks has not yet been constructed. Potential future noise sensitive land uses along this roadway segment would be contained primarily within the Plan Area itself. Noise exposure for Plan Area receptors is addressed under Impact 4.11-3(a). Because the Proposed Project would not increase traffic noise levels more than 3 dBA (the threshold for human hearing) near sensitive receptors, projected traffic noise impacts at off-site receptors would be less than significant.

**IMPACT 4.11-3(A):**

**Exposure of project receptors to transportation noise.**

**SIGNIFICANCE:**

Significant

**MITIGATION MEASURE:**

Mitigation Measure 4.11-1 (Provide appropriate noise attenuation, e.g., barriers and/or setbacks, based on site-specific acoustical analyses)

**RESIDUAL SIGNIFICANCE:**

Less than significant

Six of the roadway segments analyzed in Table 4.11-8 are adjacent to the Phase I properties: two segments along Blue Oaks from the north leg of Fiddymont to Woodcreek Oaks, three segments along Woodcreek Oaks from north of Blue Oaks to Pleasant Grove, and the proposed south entrance to the Diamond Creek development north of Blue Oaks. In the absence of intervening artificial or topographic barriers, noise levels along all of these roadway segments, except for the south entrance to the Diamond Creek property development, could exceed applicable City



TABLE 4.11-8

DISTANCES FROM CENTERLINE TO SELECTED  $L_{dn}$  CONTOURS

| Locations |                              |                                 | Contour Distances by Phase (2010 Market) |      |        |      |        |      |
|-----------|------------------------------|---------------------------------|------------------------------------------|------|--------|------|--------|------|
|           |                              |                                 | 70 dBA                                   |      | 65 dBA |      | 60 dBA |      |
| #         | Roadway                      | Segment                         | I                                        | I+II | I      | I+II | I      | I+II |
| 1         | Baseline                     | Fiddymment/Junction             | 85'                                      | 85'  | 180'   | 190' | 400'   | 400' |
| 2         |                              | Junction/Woodcreek Oaks         | 60'                                      | 70'  | 130'   | 150' | 280'   | 320' |
| 3         |                              | Woodcreek Oaks/Country Club     | 60'                                      | 60'  | 125'   | 135' | 260'   | 280' |
| 4         | Junction                     | Baseline/Woodcreek Oaks         | 35'                                      | 40'  | 80'    | 95'  | 180'   | 210' |
| 5         |                              | Woodcreek Oaks/Country Club     | *                                        | *    | 50'    | 65'  | 110'   | 135' |
| 6         |                              | Country Club/Foothills          | *                                        | 35'  | 65'    | 80'  | 140'   | 170' |
| 7         | Pleasant Grove               | Fiddymment/Woodcreek Oaks       | 35'                                      | 45'  | 85'    | 95'  | 180'   | 200' |
| 8         |                              | Woodcreek Oaks/Country Club     | 80'                                      | 85'  | 170'   | 180' | 360'   | 390' |
| 9         |                              | Country Club/Foothills          | 85'                                      | 90'  | 180'   | 190' | 390'   | 410' |
| 10        | Blue Oaks                    | Fiddymment S/Fiddymment N       | 20'                                      | 25'  | 60'    | 70'  | 130'   | 150' |
| 11        |                              | Fiddymment N/Project Entrance   | 30'                                      | 45'  | 80'    | 95'  | 170'   | 210' |
| 12        |                              | Project Entrance/Woodcreek Oaks | 40'                                      | 55'  | 90'    | 120' | 200'   | 260' |
| 13        |                              | Woodcreek Oaks/Foothills        | 75'                                      | 85'  | 170'   | 180' | 360'   | 390' |
| 14        |                              | Foothills/Industrial            | 105'                                     | 105' | 220'   | 230' | 470'   | 490' |
| 15        | Washington                   | Blue Oaks/Roseville Pkwy.       | 75'                                      | 75'  | 155'   | 160' | 340'   | 340' |
| 16        |                              | Roseville Pkwy./Industrial      | 60'                                      | 60'  | 125'   | 125' | 270'   | 270' |
| 17        |                              | Industrial/Junction             | 80'                                      | 80'  | 170'   | 170' | 360'   | 360' |
| 18        | Foothills                    | Blue Oaks/Roseville Pkwy.       | 70'                                      | 70'  | 145'   | 155' | 310'   | 330' |
| 19        |                              | Roseville Pkwy./Pleasant Grove  | 80'                                      | 80'  | 170'   | 180' | 370'   | 380' |
| 20        |                              | Pleasant Grove/Junction         | 120'                                     | 120' | 260'   | 260' | 560'   | 560' |
| 21        |                              | Junction/Baseline               | 120'                                     | 120' | 260'   | 260' | 550'   | 560' |
| 22        | Woodcreek Oaks               | N:Blue Oaks                     | *                                        | *    | 70'    | 70'  | 145'   | 145' |
| 23        |                              | S:Blue Oaks                     | 40'                                      | 45'  | 90'    | 95'  | 190'   | 200' |
| 24        |                              | Blue Oaks/Pleasant Grove        | 35'                                      | 40'  | 80'    | 90'  | 180'   | 190' |
| 25        |                              | N:Pleasant Grove                | 40'                                      | 40'  | 90'    | 95'  | 190'   | 200' |
| 26        |                              | Pleasant Grove/Junction         | 65'                                      | 65'  | 135'   | 145' | 290'   | 310' |
| 27        | Fiddymment                   | N:Blue Oaks                     | *                                        | *    | 35'    | 45'  | 80'    | 100' |
| 28        |                              | Blue Oaks/Pleasant Grove        | 35'                                      | 40'  | 80'    | 90'  | 170'   | 190' |
| 29        |                              | Pleasant Grove/Baseline         | 35'                                      | 45'  | 85'    | 95'  | 180'   | 210' |
| 30        |                              | Baseline/PFE                    | *                                        | *    | 85'    | 95'  | 180'   | 200' |
| 31        | S Entrance Diamond Creek     |                                 | *                                        | *    | 40'    | 45'  | 95'    | 100' |
| 32        | SW Entrance Woodcreek Oaks W |                                 | *                                        | *    | *      | *    | 45'    | 45'  |

\* = Either roadway segment does not exist or contour is within the roadway right-of-way.  
 SOURCE: EIP Associates, 1997.

standards (e.g., 60 dBA for residential development) at substantial distances from the roadway centerlines in areas designated for residential development. This exposure is considered potentially significant.

For reasons described in the Setting discussion, above, rail and aircraft noise is expected to have a less-than-significant impact on Proposed Project land uses.

For all roadways potentially affecting future Plan Area land uses (except for Blue Oaks Boulevard), an initial discussion of setback and/or noise barrier options is presented under section 4.11.5, Mitigation Measures, with further acoustical analysis recommended to establish specific mitigation design. Soundwalls would generally reduce noise levels by approximately 5 dBA, and, depending on the design of the soundwall and physical characteristics of the site, could reduce noise levels by up to 10 dBA. Because projected noise levels are generally in the mid-60s dBA to low 70 dBAs, a combination of soundwalls and setbacks (a doubling of distance from the roadway centerlines would reduce noise by 3 dBA) would feasibly achieve acceptable noise levels, both interior and exterior, in the Plan Area residential development. For Blue Oaks Boulevard, Mitigation Measure 4.11-3(a) presents worst-case minimum setbacks for noise-sensitive land uses, with and without intervening sound barriers, to reduce noise exposure below the City's maximum standards. Additional acoustical analysis is recommended where barriers would be included in the mitigation design. This mitigation would reduce the impact to a less-than-significant level.

|                               |                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------|
| <b>IMPACT 4.11-4(A):</b>      | <b>Exposure of project receptors to non-transportation-source noise.</b>        |
| <b>SIGNIFICANCE:</b>          | Significant                                                                     |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.11-2 (Conduct noise analysis to specify sound wall design) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                           |

The two non-transportation noise sources with the greatest potential to adversely affect proposed Phase I land uses are the Pleasant Grove Creek Wastewater Pump Station and the North Roseville Peaking Facility, described in the Setting discussion, above.

**Pump Station:** The proposed northward extension of Woodcreek Oaks Boulevard would pass just west of the Pump Station, increasing the minimum possible distance between the Pump Station and the nearest sensitive land uses (residential). It appears that this minimum distance is roughly approximated by the 200-foot distance at which pump station noise measurements were recorded. (These measurements are described in the Setting discussion, above.) Traffic noise along Woodcreek Oaks Boulevard could partially mask noise from sources at the Pump Station, at least during peak traffic periods. However, testing- and maintenance-related operation of the Pump Station's emergency power generator would still cause brief noise events that could be clearly audible above intermittent background traffic. Furthermore, the measured  $L_{eq}$  of 66 dBA would substantially exceed the City's daytime  $L_{eq}$  standard of 50 dBA. Generator testing occurs only once or at most twice per week, and lasts for more than 20 minutes only about once every three months. However, the resulting noise disturbance is still potentially significant.



Noise levels from the pumps themselves would be much lower than peak levels from the associated power generator. However, noise from at least one pump could be audible intermittently throughout the day and night. Future traffic projections along Woodcreek Oaks Boulevard indicate that fewer than one vehicle per minute is expected to pass along this segment of the roadway during nighttime hours; such sparse traffic would not effectively mask the pump noise. One-minute  $L_{eq}$ 's as high as 46 dBA were measured during pump noise measurements; 46 dBA is one decibel above the City's nighttime standard for non-transportation noise sources. Furthermore, the Pump Station has capacity for a fourth pump, which may be installed in the future when increased throughput is required. While the fourth pump wouldn't increase baseline pump noise levels, it might slightly increase noise levels experienced during periods of peak pump throughput. While average levels over more extended periods would probably not exceed the nighttime standard -- especially during off-peak nighttime hours -- the impact from this source could be marginally significant, especially when the special characteristics of the noise are considered. The City requires that residential uses be at least 100 feet from the pump station, but this distance may not be adequate to fully mitigate peak noise levels from the pumps.

Mitigation Measure 4.11-2 provides barrier and setback mitigation options that are anticipated to reduce the noise from the pump station to a less-than-significant level.

Because the noise generated by the pump station would exceed the City standard by only one decibel, a soundwall would feasibly reduce noise to acceptable levels at planned sensitive receptors in the Plan Area. The most efficient placement of the soundwall would be on the peaking facility site; however, a soundwall on the west side of Woodcreek Oaks Boulevard, which is called for in the NRSP Design Guidelines, would also be an effective barrier. While it is the pump station that is the source of noise, it is the Proposed Project that would locate sensitive receptors (residential) in proximity to the noise source causing the impact. Nevertheless, with a soundwall this impact is considered less than significant.

Peaking Facility: Based on the noise measurements at the North Roseville Peaking Facility, facility-generated  $L_{eq}$ 's at the nearest potential land uses (about 2100 feet) could be 50 to 56 dBA under very favorable noise propagation conditions. More commonly, facility-generated  $L_{eq}$ 's would probably range from the mid 40's to about 50 dBA at this location, compared with the City's 50 dBA daytime standard for non-transportation noise sources. Furthermore, as stated previously, the facility is most likely to be operating while ambient temperatures are very high; under these conditions, Plan Area residents would most likely be indoors, and therefore less exposed to the noise impacts. While the Peaking Facility is the source of noise, it is the Proposed Project that would create an impact by locating sensitive receptors (residences) into proximity of the noise source. Nonetheless, due to the circumstances described above, and the small proportion of the time during which this source would operate, noise impacts from this source are considered less than significant.

Industrial Sources Existing light industrial uses do not create enough noise to affect the Plan Area. Future light industrial facilities adjacent to residential development in the Plan Area could generate noise, but light industrial development would be required to mitigate noise impacts by complying with City standards for noise. Further, Woodcreek Oaks Boulevard and the buffer between the Plan Area and industrial land use to the north would mitigate noise impacts between



the Plan Area and land designated for light industrial uses. Therefore, noise from existing and future light industrial development is considered less than significant.

### Bill Graham Presents Amphitheater

As discussed in the Setting, an amphitheater has been proposed approximately one mile north of the Plan Area in Placer County (although the final location could be closer to the City limits). According to the Draft EIR prepared for the amphitheater, which was circulated for public and agency review beginning May 24, 1997, a variety of measures have been incorporated as mitigation to minimize the extent to which noise can be heard in the surrounding area. Based on acoustical noise studies prepared for the amphitheater Draft EIR, the amphitheater would normally not cause noise levels within the City's boundaries (including the Plan Area) to exceed the City's stationary source, nighttime noise standard of 45 Leq. The Draft EIR indicates that, in some cases, inversion layers could result in noise levels exceeding the nighttime standard by as much as three dBA. However, these violations are expected to be rare.

If the amphitheater site is moved, additional acoustical analyses would have to be prepared to evaluate its affect on nearby land uses. It is assumed that Placer County noise standards and the mitigation measures identified in the amphitheater Draft EIR would be required at any location.

Because the amphitheater would be subject to Placer County noise standards and mitigations contained in the Draft EIR, and noise levels affecting the Plan Area are expected to be within City standards, proximity of Plan Area development to the proposed amphitheater site is considered a less-than-significant impact.

## **FULL PROJECT IMPACTS**

|                          |                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.11-1(B):</b> | <b>Temporary increases in noise levels due to earthmoving and general construction activities.</b> |
| SIGNIFICANCE:            | Significant (short-term)                                                                           |
| MITIGATION MEASURE:      | None available                                                                                     |
| RESIDUAL SIGNIFICANCE:   | Significant (short-term)                                                                           |

Construction of Full Project development could affect residences at the north and south ends of the Sun City Roseville development, and residences south and east of the Woodcreek West property, as well as the off-site land uses already identified as being potentially vulnerable to project construction noise impacts under Phase I (see Impact 4.11-1(A)). As with Phase I, the City's noise ordinance could be violated for short periods of time. This is considered a short-term, significant impact.

|                          |                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------|
| <b>IMPACT 4.11-2(B):</b> | <b>Traffic noise level increases along roadways near off-site residential areas.</b> |
| SIGNIFICANCE:            | Less than significant                                                                |
| MITIGATION MEASURE:      | None required                                                                        |

Development of the Full Project would result in greater additional motor vehicle trip generation than would development of Phase I alone. However, Full Project development would also result in additional changes to the existing roadway network, potentially resulting in a redistribution of traffic that would at least partially counteract the effect of the increased trips. Table 4.11-7 shows that Full Project development would result in noise level increases relative to No Project conditions slightly greater than those under Phase I along many roadway segments. However, as under Phase I, a noise level increase greater than 3 dBA; the threshold for human hearing, would be experienced along only one roadway segment -- Woodcreek Oaks Boulevard south of Blue Oaks. Potentially sensitive land uses along this roadway segment would be contained primarily within the Plan Area itself. Noise exposure for Plan Area receptors are addressed under Impact 4.11-3(B). Projected traffic noise impacts at off-site receptors are less than significant.

|                               |                                                                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.11-3(B):</b>      | <b>Exposure of project receptors to transportation noise.</b>                                                                                 |
| <b>SIGNIFICANCE:</b>          | Significant                                                                                                                                   |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.11-1 (Provide appropriate noise attenuation, e.g., barriers and/or setbacks, based on site-specific acoustical analyses) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                                                                                         |

In addition to the six analyzed roadway segments in Table 4.11-8 that are adjacent to the Phase I properties (see Impact 4.11-3(A)), four more roadway segments would be adjacent to the Full Project development sites: Baseline between Fiddymment and Junction, Fiddymment north of Blue Oaks and between Pleasant Grove and Baseline, and the proposed southwest entrance to the Woodcreek West site. In the absence of intervening artificial or topographic barriers, noise levels along all of these roadway segments except for the two analyzed project entrances could exceed applicable City standards (e.g., 60 dBA for residential development) at substantial distances from the roadway centerlines. In the absence of specific design for roadways and residential development in the Plan Area, this exposure is considered potentially significant.

For reasons described in the Setting discussion, above, rail and aircraft noise is expected to have a less-than-significant impact on proposed project land uses.

For all roadways potentially affecting future Plan Area land uses (except for Blue Oaks Boulevard), an initial discussion of setback and/or noise barrier options is presented in Mitigation Measure 4.11-1, with further acoustical analysis called for to establish specific mitigation design. For Blue Oaks Boulevard, Mitigation Measure 4.11-3 presents worst-case minimum setbacks for noise-sensitive land uses, with and without intervening sound barriers, to reduce noise exposure below the City's maximum standards. Additional acoustical analysis is recommended where barriers would be included in the mitigation design. This mitigation would reduce the impact to a less-than-significant level.



|                               |                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------|
| <b>IMPACT 4.11-4(B):</b>      | <b>Exposure of project receptors to non-transportation-source noise.</b>        |
| <b>SIGNIFICANCE:</b>          | Significant                                                                     |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.11-2 (Conduct noise analysis to specify sound wall design) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                           |

The major non-transportation noise sources near the project would impact Phase I properties more than they would impact the remaining properties of the Full Project. Therefore, impacts under the Full Project would be comparable to those under Phase I (see Impact 4.11-4(A)). Potential impacts from sources at the Pleasant Grove Creek Wastewater Pump Station and the Peaking Facility could be significant, but could be reduced to less-than-significant levels with mitigation.

Mitigation Measure 4.11-4 provides barrier and setback mitigation options that would reduce this impact to a less-than-significant level.

#### 4.11.5 MITIGATION MEASURES

##### EXPOSURE OF PROJECT RECEPTORS TO TRANSPORTATION NOISE

**Mitigation Measure 4.11-1: Provide appropriate noise attenuation, e.g., barriers and/or setbacks, based on site-specific acoustical analyses.**

Mitigation Measure 4.11-1 applies to Impacts 4.11-3(A) and (B).

For each roadway segment that would generate noise levels in the Plan Area exceeding City noise standards for proposed land uses, the contour distances presented in Table 4.11-8 can be used to determine the worst-case minimum setback distances that would be required in the absence of noise barriers. The applicable City standard for the each proposed land use can be obtained from Table 4.11-4; the contour distances for the noise level equaling this standard (e.g., 60 dBA  $L_{dn}$  for residential development) represents the worst-case minimum setback. Project-specific acoustical studies are recommended to determine where site-specific conditions might warrant reduced setbacks and/or to assess sound wall requirements or enhanced building insulation where reduced setbacks are desired. Soundwalls could reduce noise levels as much as 5 dBA or even, depending on the circumstances, up to 10 dBA, and a doubling of distance from the roadway centerline would provide a reduction of approximately 3 dBA.

Required mitigation along Blue Oaks Boulevard will be discussed specifically. Table 4.11-8 indicates that, under Phase I conditions, setbacks of about 130 to 200 feet from the roadway centerline would be required to assure an acceptable exterior noise environment for residences and other noise-sensitive land uses in the absence of intervening barriers. In general, a noise wall just tall enough to interrupt the line of sight between a traffic noise source and a receptor will reduce noise exposure at that receptor by about five decibels. Therefore, if a barrier about 6 feet in height were erected along the Proposed Project's frontage along Blue Oaks, the minimum required setback for residences and other noise-sensitive land uses would be closer to the 65 dBA



$L_{dn}$  contour distances -- about 80 to 90 feet from the roadway centerline (Blue Oaks is planned to be 180 feet wide, including landscaping, so under this approach, a wall could be erected at the edge of the right-of-way). This is only an approximate estimate; the actual noise level/distance relationship becomes more complex when a barrier is introduced, and even minor changes in the base elevation of roadway, receptor or barrier can influence barrier effectiveness.

Exterior noise exposure up to 65 dBA would likely assure that *interior* noise levels for such land uses would be acceptable (i.e., 45 dBA  $L_{dn}$  or less). Therefore, the 80 to 90-foot maximum setback should adequately protect interior spaces, whether they be first-floor areas where no wall is present, or upper-floor areas that would not be adequately protected by a wall. For first-floor interior spaces also protected by a 6-foot high external barrier, setbacks as little as 30 to 40 feet from the roadway centerline should be acceptable.

Setback requirements could be reduced even further using either of the following methods:

- Where interior noise is the primary concern, assure exterior-to-interior noise reductions greater than the 20 dBA assumed to be provided by standard construction practices.
- Provide a barrier height greater than 6 feet; noise reductions of 10 dBA or greater may be possible.

Where external barriers or enhanced building insulation would be relied upon to provide adequate protection, or where setback constraints less than those established by the worst case analysis are desired, project-specific acoustical analyses are recommended.

Under the Full Project, the worst-case unmitigated setback requirements for project sensitive receptors along Blue Oaks would be about 150 to 260 feet, the worst-case minimum setbacks for interior spaces unprotected by a wall or exterior spaces protected by an approximately 6 foot high wall would be about 75 to 130 feet, and corresponding minimum setbacks for interior spaces protected by an exterior wall would be 45 to 55 feet.

## NOISE DUE TO NON-TRANSPORTATION SOURCES

### Mitigation Measure 4.11-2: Conduct noise analysis to specify soundwall design.

Mitigation Measure 4.11-2 applies to Impacts 4.11-4(A) and (B).

To reduce noise impacts from the Pleasant Grove Creek Wastewater Pump Station, the applicant shall implement one or more of the following measures prior to development of the northeast portion of the Diamond Creek properties (Neighborhood A).

- Fund the construction of one or more physical barriers on the Pump Station property or at its boundary. Options might include a single barrier along the entire western and southern boundaries, at least six feet in height. Alternatively, separate, shorter barriers could be erected, one starting near the door on the west side of the main Pump Station and extending northward past the pipes that exit this building on the north side, the other

partially or completely enclosing the emergency power generator. These walls would need to be of sufficient height to interrupt the line of site between these potential noise sources and noise "leaks".

- Erect a barrier on the west side of the proposed Woodcreek Oaks Boulevard extension near the Pump Station, at least six feet high. This barrier could be a soundwall installed to mitigate traffic noise from Woodcreek Oaks Boulevard, as shown in the NRSP. While such a barrier would be less effective against noise from Pump Station sources than source-based barriers would be, the barrier would have the additional benefit of substantially reducing traffic noise.
- Do not locate any noise-sensitive land uses within 400 feet of the Pump Station.

Any of these measures would reduce pump-generated noise to levels well below the City's nighttime standard. While they may not reduce generator noise levels to below the City's daytime standard, mitigation of this source should be adequate given the very limited periods during which the generator would be operated.

TABLE 4.11-9

## NOISE IMPACT RESIDUAL SUMMARY TABLE

| Impact                                                                                                       | Phase I Impacts          | Full Project Impacts     |
|--------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| 4.11-1 (A and B) Temporary increases in noise levels due to earthmoving and general construction activities. | Significant (short-term) | Significant (short-term) |
| 4.11-2 (A and B) Traffic noise level increases along roadways near off-site residential areas.               | Less than significant    | Less than significant    |
| 4.11-3 (A and B) Exposure of project receptors to transportation noise.                                      | Less than significant    | Less than significant    |
| 4.11-4 (A and B) Exposure of project receptors to non-transportation-source noise.                           | Less than significant    | Less than significant    |

**ENDNOTES**

1. Federal Highway Administration, 1982. *Report of Field Review - Highway Traffic Noise Impact Identification and Mitigation Decisionmaking Processes*. Office of Environmental Policy. June.
2. Code of California Regulations (CCR), 1988. California Noise Insulation Standards, California State Building Code (Part 2, Title 24, CCR), Appendix Chapter 35, Sound Transmission Control.



---

---

## ***4.12 PUBLIC SERVICES AND UTILITIES***

---

---



---

---

## ***4.12 PUBLIC SERVICES AND UTILITIES***

---

---

### **4.12.1 INTRODUCTION**

This section of the NRSP Draft EIR describes the public services and utilities provided in the City of Roseville, including domestic water, reclaimed water, wastewater disposal, police services, fire protection services, solid waste disposal, electricity, natural gas, schools, libraries, parks and recreation, and cable television and telephone services. The section also identifies the anticipated demand for these services resulting from the implementation of the proposed NRSP.

In order to provide a more conservative (i.e. worst case) impact analysis, the discussion for water and wastewater impacts uses a Year 2010 market condition as the baseline upon which the Proposed Project is added. For water and wastewater, there is an incremental difference between Phase I existing entitled land uses versus the areas to be rezoned. This analysis is not additive, but examines this incremental difference, because water and wastewater quantities have already been calculated for existing land use designations into the city's demand projections. For all other public service and utility impact analyses, the site's existing conditions are used as the baseline scenario upon which the Proposed Project is added.

### **4.12.2 ENVIRONMENTAL SETTING**

#### **DOMESTIC WATER**

##### **Regional Water Supply**

##### **Surface Water**

The City of Roseville Water Division provides water to about 2,490 commercial and over 22,000 residential connections within the city. Total city-wide use ranges from 11,000 to 21,000 acre-feet per year (af/yr) in 1996. The current average daily water demand is about 19 million gallons per day (mgd). Daily demand is about 9.0 mgd during the winter with the average level of water usage per household approximately 1.0 af/yr (this is an average of all connections and total water used assuming a consistent mix of commercial usage). Summer of 1996 peak flows exceeded 39 mgd. Projected average water demand under 2010 market conditions is anticipated to be approximately 27.6 mgd (with the proposed Highland Reserve North project) and maximum daily water demand is anticipated to be approximately 55.2 mgd.<sup>1</sup> Buildout of approved land uses is expected to increase average daily demand to 40.0 mgd and maximum daily demand to 80.0 mgd.

Most of the City's water supply is provided from the United States Bureau of Reclamation (USBR) and the Placer County Water Agency (PCWA). The USBR is responsible for the



management of the Folsom Reservoir. Folsom Reservoir is part of the Central Valley Project, which is a federally-operated network of California dams, reservoirs, and canals.

The City's entitlement for untreated surface water from the USBR (under Contract #14-06-200-3474A) includes 32,000 af/yr (approximately 28.6 mgd) from Folsom Reservoir and 30,000 af/yr (26.8 mgd) from the PCWA (original contract option May 17, 1989, second option November 20, 1991, and third option October 6, 1994) for a total water allocation of 62,000 af/yr (55 mgd). The USBR and PCWA water entitlement contracts are available for public review at the Roseville City Clerk's office at 311 Vernon Street, Roseville, California. PCWA manages reservoirs located on the American and Yuba Rivers. Several water supply studies have been prepared or are in draft form, including *Increasing Peak Water Supply Flows from Folsom Dam*, *PCWA Master Plan*, and *American River Water Resources Investigation*. A long-term Wheeling agreement with the USBR is currently being pursued by the City of Roseville, and is anticipated to be in place by late 1997/early 1998.

Table 4.12-1 summarizes the City's current water entitlement, which includes 28.5 mgd from USBR and 26.8 mgd from PCWA. Combined, these two contract amounts exceed the maximum discharge from Folsom Lake of 42 mgd currently provided to the City of Roseville.

| <b>TABLE 4.12-1</b>                        |                                           |                                |                                           |                           |
|--------------------------------------------|-------------------------------------------|--------------------------------|-------------------------------------------|---------------------------|
| <b>CITY OF ROSEVILLE WATER ENTITLEMENT</b> |                                           |                                |                                           |                           |
| <b>Source</b>                              | <b>Agency</b>                             | <b>Amount<br/>(acre-ft/yr)</b> | <b>Maximum<br/>Daily Amount<br/>(mgd)</b> | <b>Present<br/>Status</b> |
| American<br>River at<br>Folsom Lake        | United States<br>Bureau of<br>Reclamation | 32,000                         | 28.5                                      | Contracted                |
| American<br>River at<br>Folsom Lake        | Placer County<br>Water Agency             | 30,000                         | 26.8                                      | Contracted                |
| <b>TOTAL</b>                               |                                           | 62,000                         | 55.3                                      | Contracted                |
| SOURCE: The Spink Corporation, 1995.       |                                           |                                |                                           |                           |

In addition to the water entitlements discussed above, the City can access emergency water from other sources (e.g., PCWA) to respond to emergency conditions or to transfer water between jurisdictions or to temporarily supplement the City's water supply. These sources include wells and interties with surrounding agencies.

The Plan Area is presently undeveloped with no current uses that require City water.

## **Drought Conditions**

In 1991, the City of Roseville developed and adopted the Roseville Water Conservation and Drought Mitigation Plan. Under this plan, the City has authority to declare water shortage conditions and implement drought related mitigation measures. The City can initiate this process by declaring the drought stage and imposing the appropriate and corresponding drought response measures. The stages and drought response measures are presented in Table 4.12-2. City groundwater wells can be activated to supplement surface water during droughts, but cannot be used to avoid declaration of Stage I or Stage II conditions.

Due to the past drought conditions throughout California, Roseville's water entitlement was reduced by 50 percent in 1990, 75 percent in 1991, 28 percent in 1992, and 44 percent in 1994. The 75 percent reduction in 1991 required the City to exercise water options with PCWA. Even with the PCWA option, the City had a 3,000 af/yr shortfall in 1991, which equated to 2.7 mgd and represented approximately 20 percent of the water demand. Per the Water Conservation and Drought Mitigation Plan, the City of Roseville declared a Stage II drought and imposed the corresponding drought response measures. Although substantial rainfall during the 1992-1993 and 1994-1995 rain seasons has ended the drought, the City's Drought Mitigation Plans would apply during any future droughts.

## **Water Treatment**

The City operates the Roseville Water Treatment Plant, a potable water treatment plant that treats raw water from Folsom Reservoir. The plant is located on Barton Road in Placer County. The plant has primary clarification and filtration capabilities. Water treatment consists of coagulation, flocculation, filtration, and disinfection. Other chemicals used are lime for pH control and fluoride for the health of residents.

In 1989, the plant was expanded to a treatment capacity of 48 mgd. A 12 mgd water treatment plant expansion is scheduled to begin the design phase in 1997 with project completion scheduled for the Year 2001. A second expansion of 12 mgd is expected to be complete by 2010 or 2011, bringing total treatment capacity to 72 mgd. Future expansions would occur as needed.<sup>2</sup>

## **Water Conveyance and Distribution**

As discussed above, the City's water supply is provided by the USBR and PCWA. The USBR water discharged from Folsom Reservoir is conveyed through an 84-inch diameter tunnel through Folsom Dam. USBR restrictions on the velocity of flow through the tunnel limit the rate of water conveyance from the reservoir to 249 mgd; however, normal flows have not yet reached this limit and historic flows have only reached 136 mgd. Due to this limitation and to commitments with other users, the maximum amount of water that can be conveyed to the City of Roseville through existing USBR facilities is 42 mgd, even though the City is entitled to 55.3 mgd of supply. The City is currently designing modifications to USBR pumping facilities to increase the peak conveyance capacity to 96 mgd.

TABLE 4.12-2

**CITY OF ROSEVILLE  
DROUGHT STAGES AND DROUGHT RESPONSE MEASURES**

| Stage       | Surface Water Supply                               | Drought Response Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic Stage | Capable of meeting all projected demands           | Landscape standards, drought-tolerant landscape for model homes, water consumption calculations required, site reviews including water reclamation or recycling capabilities.                                                                                                                                                                                                                                                                                                                                                                               |
| Stage I     | Capable of meeting 90 percent of projected demands | Basic Stage mitigation plus no washing of paved areas, use of buckets and control nozzle for washing vehicles, restaurants serve water only upon request.                                                                                                                                                                                                                                                                                                                                                                                                   |
| Stage II    | Capable of meeting 80 percent of projected demands | Stage I mitigation plus irrigation of landscape only from 4 am to 8 am or 8 pm to 10 pm, reduction of nonresidential irrigation by 30 percent over 1990 usage.                                                                                                                                                                                                                                                                                                                                                                                              |
| Stage III   | Capable of meeting 70 percent of projected demands | Stage II mitigation plus allowance of only drought-tolerant varieties for new and expanded landscaping, reduction of nonresidential irrigation by 50 percent over 1990 usage, hand watering of trees and shrubs, no watering of golf course fairways, irrigation of only one-half of City park and median turf areas, drainage of all decorative pools and fountains, augmentation of construction dust control by use of hardened temporary travel routes, covering of swimming pools when not in use and prohibition of refilling drained swimming pools. |
| Stage IV    | Capable of meeting 60 percent of projected demands | Stage III mitigation plus reduction of nonresidential irrigation by 75 percent over 1990 usage, residential irrigation only by hose with control nozzle, no irrigation of City park and median turf, prohibition of using water for dust control.                                                                                                                                                                                                                                                                                                           |
| Stage V     | Capable of meeting 50 percent of projected demands | Stage IV mitigation plus no irrigation of turf and grass areas, irrigation of drought tolerant trees and shrubs only by hose control nozzle.                                                                                                                                                                                                                                                                                                                                                                                                                |

SOURCE: City of Roseville Water Conservation and Drought Mitigation Plan, 1991.



In addition to water provided by the USBR, PCWA also supplies water to the City. To obtain the 30,000 af/yr supplied by the PCWA, a Wheeling agreement is being pursued to allow Roseville to take PCWA water from Folsom Reservoir through the USBR facilities. There are limitations on the existing distribution system and regulations that prevent delivery of allocated PCWA water to the City of Roseville. These limitations include:

- the current City-PCWA intertie can only accommodate 10 mgd and this water is committed to conveyance from one side of the city to the other (wheeling of water through the City system to provide treated water to PCWA water customers) and is not intended for use by the City;
- PCWA raw water can only be distributed to the city through Folsom Lake after a Wheeling agreement between the City and the USBR has been executed; and
- the City's contract with USBR allows a maximum discharge of 42 mgd through existing facilities.<sup>3</sup>

To obtain additional water, the City of Roseville, City of Folsom, and the San Juan Water District (SJWD) are upgrading the existing USBR Folsom Dam Pumping facility to increase conveyance capacity for Roseville from 42 mgd to 96 mgd. A new raw water line would also be required for transport of this additional water once pumping facilities are upgraded. Both the modifications to the pumping facilities and a new raw water line are being designed. The City is also conducting environmental review required for the raw water line. Construction of these projects is anticipated to be complete before the Year 2000.<sup>4</sup>

The City of Roseville owns and operates a network of piping, pressure stations and storage facilities designed to provide a high-quality supply of potable water at the City's required system pressure. A 42-inch pipeline and a 63-inch equivalent pipeline carry water from the treatment plant into the southeast corner of the city. The City owns and operates three water storage tanks. A two million gallon (mg) tank and four mg tank are located at the water treatment plant, a six mg tank is located just west of Sierra College Boulevard in the Cavitt Ranch area. The City is designing a 10 mg tank which will be located adjacent to the 6 mg tank. These reservoirs are used for operation, fire flows and emergency storage. Water throughout the city is distributed by pipelines ranging from 12 inches or smaller to as large as 54 inches.<sup>5</sup> The delivery system, according to the City of Roseville, adequately delivers water throughout the city, maintains acceptable pressure level, and provides back-up delivery in the event of disruption to normal service.<sup>6</sup>

The water distribution system infrastructure and facilities within a development are funded by the developers. Major infrastructure improvements to maintain City facilities are funded by fees and dedications, and are prioritized in the City's Capital Improvement Plan.<sup>7</sup>

Water distribution facilities are provided to the Plan Area in several locations, as discussed below.

### **Neighborhoods A and B (Phase I) and C (Phase II)**

Water transmission mains are located west of the Plan Area on Blue Oaks Boulevard near Del Webb Boulevard, and east of the Plan Area at the intersection of Blue Oaks and Foothills Boulevards, and south in Woodcreek Oaks Boulevard. A new 24-inch diameter water main to be located along Blue Oaks Boulevard, between Foothills and Del Webb Boulevards, is under design. Construction of the line is anticipated to begin in late Spring or early Summer 1997.

### **Neighborhood D (Phase II)**

In the southern portion of the Plan Area, Neighborhood D (Woodcreek West), water lines are located along Pleasant Grove Boulevard, Junction Boulevard, and Baseline Road.

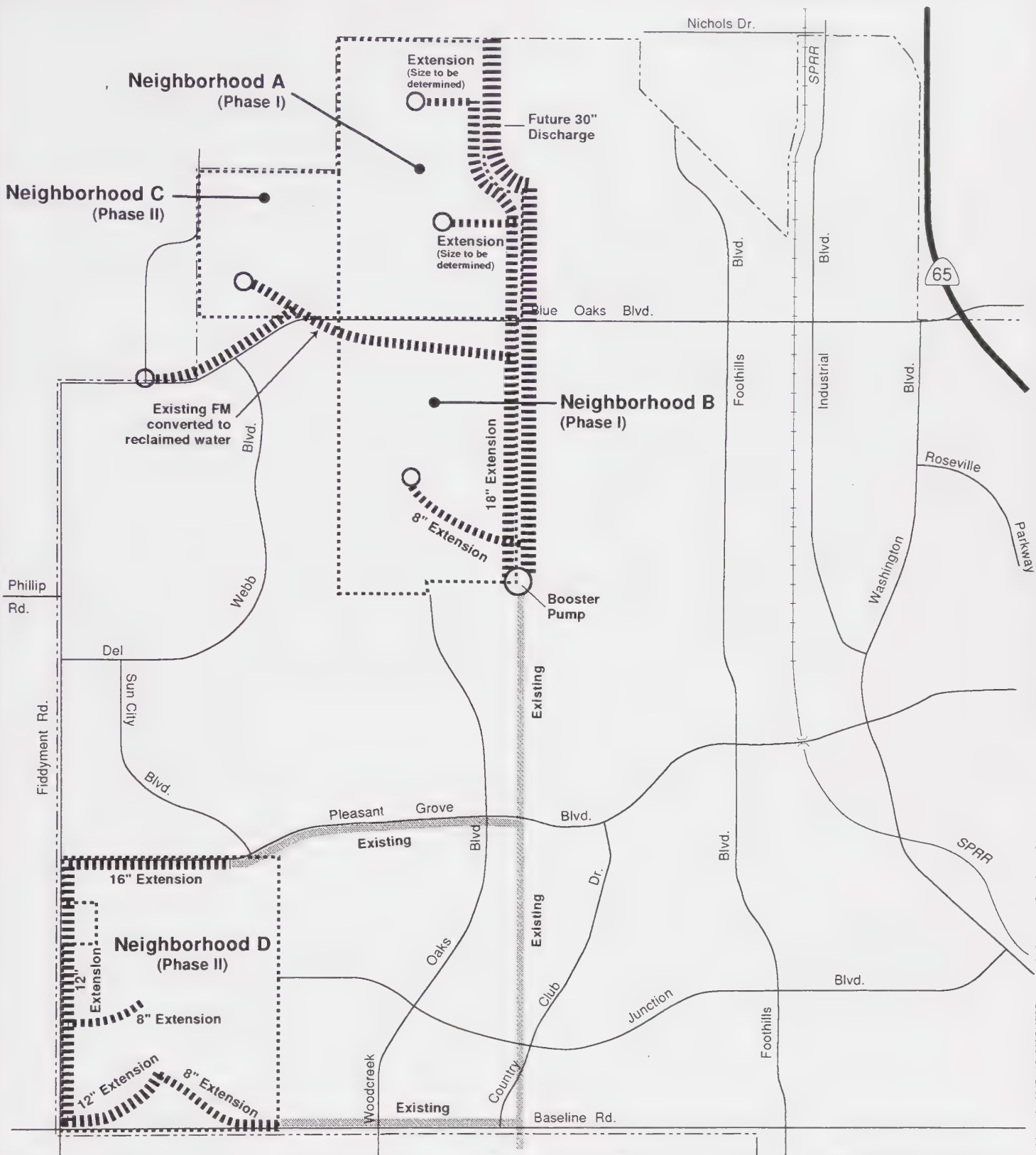
### **Water Conservation**

The Water and Energy Conservation Component of the City of Roseville General Plan encourages resource conservation and protection. In the interest of promoting water conservation, the City provides an information program to encourage conservation and to help reduce consumption. Title 24 of the California Code of Regulations is the implementation tool for such conservation efforts required by water system policies. The Code requires water conserving standards for new developments, including low-flow shower heads and low-flush toilets. All landscaping must also comply with Roseville Water Efficient Landscape Requirements. In addition, the Central Valley Project Improvement Act of 1992 mandates, among other measures, that municipalities implement water conservation measures.

### **Reclaimed Wastewater**

The City of Roseville does not use reclaimed water at this time. The City intends to use reclaimed water for irrigation of the Del Webb, Diamond Oaks, and Sierra View golf courses, Woodcreek Golf Club, Mahaney Park and proposed park No. 37. It is expected that parks in the Plan Area would use reclaimed water. Reclaimed water distribution lines have been constructed from the City of Roseville Regional Wastewater Treatment Plant to near Pump Station 2, along Pleasant Grove Boulevard and Baseline Road. Figure 4.12-1 shows the location of the City's existing reclaimed water lines and the planned connections to the Proposed Project's reclaimed water line infrastructure.

Current wastewater flows to the treatment plant average 13 mgd. The plant has recently been expanded to handle 18 mgd. The system is capable of supplying 6 mgd of reclaimed wastewater and would be capable of supplying additional water as the rate of inflow increases.



..... Neighborhood Boundary  
Within Specific Plan Area

--- Roseville City Limits

— Existing and Approved Roads

Existing Reclaimed  
Water Line

8" Reclaimed  
Water Extension

12" Reclaimed  
Water Extension

**Figure 4.12-1**

## Reclaimed Water

0 1/4 1/2  
Scale In Miles



96063  
Base







## **WASTEWATER**

### **Wastewater Collection**

Wastewater from the City of Roseville is collected in and travels through gravity pipelines and force mains which deliver wastewater to the Roseville Regional Wastewater Treatment Plant. The plant is located in the southwest portion of the city. Major collection lines vary in size, from 15 inches to 66 inches.<sup>8</sup> The City operates 23 wastewater pumping stations.

The wastewater treatment system is funded by fees. The collection system is almost completely constructed and funded by the developer.<sup>9</sup> The City of Roseville Municipal Code, Section 14.6, mandates that new development participate in the Regional Sewer Connection Fee, used for funding the expansion of the treatment plant, and the Local Sewer Connection Fee, used for expansion of the collection system throughout Roseville. The Special Area Sewer Connection Fee is assessed to properties that are serviced by the wastewater force main entering the treatment plant from the north and wastewater flows that pass through the weir near Oakridge and Coloma Way.<sup>10</sup> This fee is applied to sewer replacement, sewer enlargement, lift stations, and other improvements for areas of special benefits on a fair-share basis, as necessary to supply specific areas or developments. In addition to these fees, Sewer Special Benefit Area Number 2 is a financing district established in the north central area as part of the North Roseville-Rocklin Sewer Assessment District. This benefit area provides financing for new or modified pump stations, lift stations, and gravity pipelines.

### **Wastewater Treatment**

The City's wastewater is treated at the Roseville Regional Wastewater Treatment Plant, which is located along Dry Creek on Booth Road in the southwest portion of the city. The treatment plant also treats wastewater from Rocklin, Loomis, Granite Bay, and several unincorporated portions of Placer County.<sup>11</sup>

The plant provides tertiary-level wastewater treatment through the process of screening, grit removal, primary clarification, aeration, secondary clarification, filtration, chlorination and dechlorination. The plant was recently expanded to provide full nitrification. Sewage sludge is transported to the Western Regional Sanitary Landfill for disposal. The plant can discharge up to 18 mgd dry weather flow into Dry Creek and 45 mgd wet weather flow under an existing National Pollutant Discharge Elimination System permit.

The plant's existing capacity is 18 mgd peak dry weather flow and 45 mgd peak wet weather flows. Current flows are averaging 13 mgd, of which 5 mgd come from the City of Roseville. Peak flows approach 30 mgd in wet conditions. The City is planning to expand wastewater treatment capacity to serve its needs through 2015.

The City, in conjunction with other incorporated and unincorporated areas, has prepared a Wastewater Treatment Service Area Master Plan.<sup>12</sup> This plan addresses the feasibility of expanding the existing city treatment plant to provide treatment capacity through 2015. The EIR for the Plan was certified by the Roseville City Council in late November 1996, but approval of

the plan is still pending. In addition, the feasibility of constructing a second wastewater treatment plant in the Pleasant Grove wastewater shed is being investigated.

Wastewater conveyance facilities exist on and near the Plan Area. The NRSP states that the new wastewater lines in the Plan Area would directly or indirectly connect to the existing sewer mains.

### **Neighborhoods A and B (Phase I) and C (Phase II)**

Existing sewer force mains are located along the eastern boundary of the Plan Area and would be used on a short-term basis. Long-term service for the Plan Area would be via gravity sewer mains constructed to connect to a future pumping station (proposed Pump Station 1A). Existing reclaimed water distribution lines have been constructed along Pleasant Grove Boulevard and Baseline Road.

### **Neighborhood D (Phase II)**

An existing gravity line, which flows to Pump Station 5, is located near abandoned Pump Station 4 south of Pleasant Grove Boulevard along the northeastern boundary of Neighborhood D. This gravity line would be used on a short-term basis. Long-term service to the Plan Area would be provided via a new pump station, which would inject into force mains located along Fiddymont Road. Existing reclaimed water lines are present in Baseline Road and along Pleasant Grove Boulevard.

## **POLICE SERVICES**

The Roseville Police Department (RPD) provides police protection services to the City of Roseville. The RPD has a force of 77 sworn officers and 55 non-sworn employees headquartered at 401 Oak Street. A new headquarter facility is being planned for 1051 Junction Boulevard and is expected to be completed by late 1997 or early 1998.<sup>13</sup> Sworn officers are responsible for emergency and law enforcement-related activities. Non-sworn employees are responsible for specific duties including animal control, dispatch, record maintenance, jail management, and clerical tasks. The RPD has a department training plan that ensures that personnel are sufficiently prepared to fulfill their responsibilities.

The RPD has divided the city into three patrol beats and 37 neighborhood areas. Each patrol beat contains between eleven and thirteen neighborhood areas. The NRSP is within the northwest patrol beat. The northwest patrol beat extends from Baseline Road on the south, Washington Boulevard on the east, and the Roseville city limits on the west and north. The southern section of the NRSP has been designated as neighborhood area 35, and the northern section of the NRSP has been designated as neighborhood area 36. In addition to routine patrol, traffic enforcement, and responding to calls for service, the RPD assigns a beat officer to each neighborhood area on a long-term basis. Each beat officer monitors his or her assigned area for recurring crime and social disorder problems, helps organize neighborhood groups, attends community meetings, and works with the residents and businesses to solve problems and maintain a high quality of life.



Although the majority of the Plan Area is located within the jurisdiction of the RPD, the Placer County Sheriff's Department is responsible for unincorporated areas immediately adjacent to the city. This area is served by the South Placer Sheriff's Substation. The Sheriff's Department also serves as the County Coroner and serves legal papers on all areas of the county. An interagency coordination program between the RPD and the Placer County Sheriff's Department exists. Roseville has interoperability agreements with the cities of Rocklin and Lincoln to provide 911 and dispatching services in the event of an evacuation or system failure.

The RPD's Neighborhood Policing Unit (NPU) and Youth Services Division are responsible for community-based crime prevention and public education. The Neighborhood Policing Unit administers Neighborhood Watch programs and community relations events. The NPU act as liaisons between the department and the Roseville Coalition of Neighborhood Associations (RCONA), organizing neighborhood areas and pairing each one with a beat officer. The Youth Services Division assigns police officers to every public elementary, intermediate, and high school in the City. The division administers the DARE (Drug Abuse Resistance Education) program in city elementary schools, and a summer camp for at-risk youth.

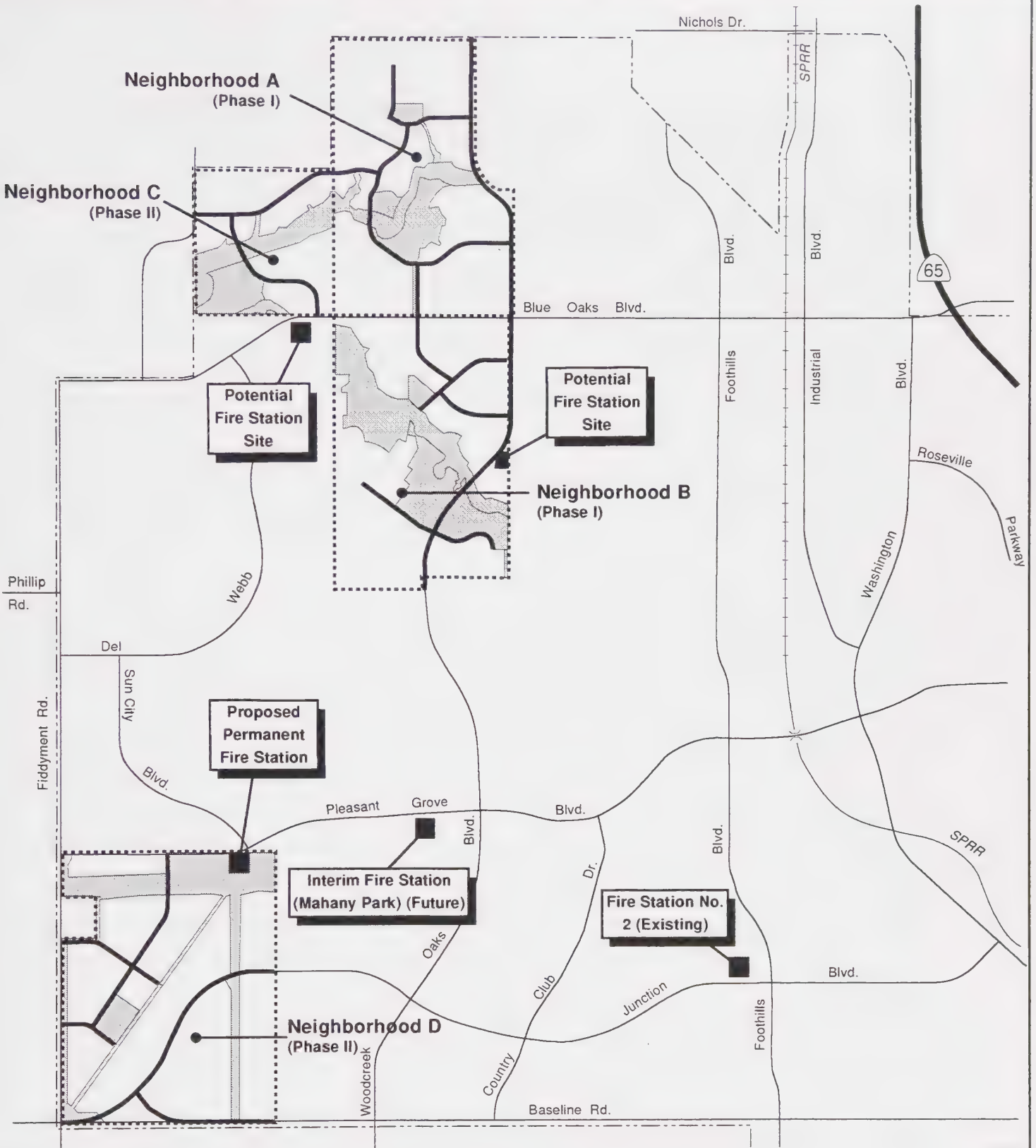
The RPD has indicated that flexibility is a key component in the provision of competent police service, and that standard ratios of police officers to population do not define adequacy of protection. Flexibility in service ratios allows the department to better respond to changes in the frequency and nature of crimes in the city. For this reason, the City has not adopted a police-to-population ratio. In 1995, the current ratio of police to population was 1.23 officers per 1,000 persons. RPD has indicated that even without an adopted ratio, they would not want the ratio to fall below 1.22 officers per 1,000 persons. The RPD has also not adopted a formal response time standard, but the current response time is approximately 3 to 5 minutes or less for an emergency call.<sup>14</sup>

## **FIRE PROTECTION SERVICES**

The Roseville Fire Department (RFD) provides fire protection services within the City of Roseville. The RFD operates four fire stations serving the City of Roseville. The RFD employs 60 firefighters for emergency response, six Fire Prevention personnel, and 5 staff members for administrative support.<sup>15</sup>

The RFD fire department headquarters (Fire Station No. 1) is located at 401 Oak Street approximately 4.5 miles from the Junction Boulevard entrance into the Woodcreek Oaks property (Phase II). Fire Station No. 1 maintains a maximum staff of seven firefighters at all times, including an engine company consisting of a captain, engine driver, and a firefighter/paramedic.<sup>16</sup> Fire Station 1 also includes a 100-foot ladder truck staffed with four firefighters, a water tender and a hazardous materials response truck. Other RFD fire stations are located at 1398 Junction Boulevard (Fire Station No. 2), 1300 Cirby Way (Fire Station No. 3), and 1900 Eureka Road (Fire Station No. 4).<sup>17</sup> Figure 4.12-2 shows the location of the fire station Number 2 in relation to the Plan Area. Each of these fire stations maintains a staffing level of three firefighters at all times. Each station is equipped with one fire engine, and Fire Stations 2 and





**Figure 4.12-2**

## Fire Protection Facilities

SOURCE: Wade Associates, *North Roseville Specific Plan Draft*, 1996;  
EIP Associates, May 1997.

0 1/4 1/2  
Scale In Miles



96063  
Base

**eip**





4 share a type III grassfire engine during the summer months. The RFD has mutual aid agreement with surrounding Placer County and Sacramento County fire departments and districts.

The RFD does not necessarily associate higher population levels with the need for new fire stations. Instead, the RFD uses a risk assessment model in relation to existing fire stations and the number of engine/truck companies as the primary criterion when evaluating the need for a new fire station or additional staff. Large infill development can, for example, be adequately served by an existing, proximate station, while a remote smaller development may require a new facility. To maintain adequate fire protection, the RFD uses four different service standards based on emergency type: (1) provide emergency fire services within four minutes 80 percent of the time; (2) provide basic life support services within four minutes 80 percent of the time; (3) provide advanced life support within four to six minutes 90 percent of the time; and (4) deliver 500 gallons per minute within ten minutes.<sup>18</sup>

The RFD's emergency fire response standards are being met 71 percent of the time and the basic life support response standard is met approximately 83 percent of the time. The advanced life support response standard is being met 76.6 percent of the time. Fire flow deliveries are being met.<sup>19</sup>

The RFD traditionally receives its budget from the City's General Fund. In 1984, to compensate for the City's rapid growth rate, the Fire Service Construction Tax was approved. This tax requires that 0.5 percent of the value of any new construction be collected as part of the building fee and designated for fire suppression and protection. These funds supplement the General Fund and are specifically intended for capital improvements, such as fire stations and fire equipment. None of these funds are allocated to operating expenses, such as salaries or training. The tax would remain in effect until December 2009.

In order to provide fire protection services for the Del Webb Specific Plan development and Phase II of the NRSP, as well as the existing and approved residential development in the vicinity of the Plan Area, an interim fire facility is planned for construction on Pleasant Grove Boulevard within the future maintenance area of Mahany Park. The interim fire facility is planned for completion in July 1997.<sup>20</sup> A new permanent station is planned in the Woodcreek West property (Neighborhood D) on the south side of Pleasant Grove Boulevard.

To serve Neighborhood A (Diamond Creek/Eskaton), Neighborhood B (Mourier 140/Woodcreek North), and Neighborhood C (Walaire 160) a new three-person station is planned. The RFD has not determined the exact location for this new station, but potential locations include the northeast corner of Del Webb and southeast corner of the Mourier 140 property in Neighborhood B. The RFD is also exploring sites to the north and east of the NRSP which would serve Phase I as well as adjacent areas. The choice of site will depend on potential response time and amount of overlap between station service areas.

## **SOLID WASTE DISPOSAL**

Solid waste generated in the City of Roseville is hauled to the Western Regional Sanitary Landfill (WRSL) located on 320 acres at the southwest corner of Athens Road and Fiddymont Road, approximately ten miles north of the City of Roseville. The landfill is owned and operated by the Western Placer Waste Management Authority, which is comprised of the Cities of Roseville, Rocklin, and Lincoln, and Placer County. The City of Roseville has entered into a joint powers agreement with these other agencies for solid waste management and operates under the County's Solid Waste Management Plan. Collection of solid waste within the area is operated and managed by the City's Environmental Utilities Department.

According to the City's Source Reduction and Recycling Elements (SRRE), the WRSL is a Class III non-hazardous landfill with a remaining capacity of 6,370,000 tons, and a life expectancy of approximately 25 years. Placer County is planning to expand the landfill by 480 acres, which would increase the life of the facility to 35 years. According to the Environmental Utilities Department, the WRSL is adequately accommodating refuse generated by the City. Fees are collected from residential, commercial, and industrial accounts to cover collection costs and disposal methods.

In 1990, the total amount of solid waste generated in the City of Roseville was 70,784 tons, which consisted of 29,385 tons of residential waste, 25,970 tons of commercial waste, 3,976 tons of industrial waste, and 11,452 tons of construction/demolition debris waste. With a population of 45,797, the total waste generation, including that from non-residential sources, equates to 1.54 tons per capita per year. In 1995, the total amount of solid waste generated in the City was 74,589 tons.<sup>21</sup> With a population base of 59,432 residents this equates to 1.26 tons per capita per year, which is shown in Table 4.12-3.

**TABLE 4.12-3**

**CITY OF ROSEVILLE  
ESTIMATED SOLID WASTE GENERATION (1990-2005)**

| <b>Year</b> | <b>Gross Solid Waste Generated (tons)<sup>1</sup></b> | <b>Anticipated Solid Waste Diversion (tons)</b> | <b>Percent of Solid Waste Diverted</b> | <b>Total Solid Waste Disposed at Landfill (tons)</b> |
|-------------|-------------------------------------------------------|-------------------------------------------------|----------------------------------------|------------------------------------------------------|
| 1990        | 70,784                                                | 5,350                                           | 7.6%                                   | 65,434                                               |
| 1995        | 94,381                                                | 23,595                                          | 25.0%                                  | 70,786                                               |
| 2000        | 117,963                                               | 58,981                                          | 50.0%                                  | 58,981                                               |
| 2005        | 141,568                                               | 70,784                                          | 50.0%                                  | 70,784                                               |

<sup>1</sup> Based on per capita solid waste generation of 1.54 tons per year and general plan population estimates.  
SOURCE: City of Roseville, 1995.



The SRRE also addresses plans to construct a Material Recovery Facility (MRF) system to assist in reaching the state-mandated recycling goals. The MRF, which opened in November 1995 at the WRSL, separates and recovers waste products for recycling, reuse, or conversion to energy resources.

## **ELECTRICITY**

The City of Roseville Electric Department provides electrical service to customers within the City limits. The 1996 electrical demand for the city was approximately 184 megawatts (MW). By the year 2010, the City's electrical demand is expected to rise to 304 MW, which will require additional entitlements of 120 MW to adequately supply the forecast demand in 2010.<sup>22</sup>

The City purchases wholesale electrical power and distributes it through transmission and distribution lines. The City is entitled to approximately 187.3 MW. The City purchases power from both the Western Area Power Administration (WAPA) and from other members of the Northern California Power Agency (NCPA), a joint powers agency. WAPA markets power that is generated by the federal government's Central Valley Project. The City's contract, which expires in 2004, is for 69 MW. WAPA entitlement can provide for 38 percent of the city's total capacity and up to 50 percent of the total energy requirement at full allocation (1996). This source is the City's lowest-cost resource. However, WAPA is not expected to increase its electrical output. It is anticipated to meet a smaller percentage of the City's total energy needs as electrical demand continues to increase.

As a member of the NCPA, the City of Roseville has interconnection agreements with Pacific Gas and Electric (PG&E). Besides using PG&E transmission facilities, the City can purchase power from other members and entities. The City uses approximately 118.3 MW of electricity from NCPA sources, which include:

- 27.9 MW out of 24 MW total from the Calaveras hydroelectric project in Calaveras, Alpine, and Tuolumne Counties;
- an additional 15.2 MW purchased from Palo Alto's Calaveras entitlement (through 2004);
- 2.6 MW out of 110 MW total from Geothermal No. 1 located in the Geysers area of Northern California (the plant capacity will gradually reduce as stream field limitations occur);
- 3.8 MW out of 110 MW total from Geothermal No. 2, also located in the Geysers area (plant capacity will gradually reduce as stream field limitations occur);
- 16.3 MW out of 125 MW from five combustion turbines owned by NCPA, of which two are located in Roseville;
- 20 MW from steam-injected combustion turbine in Lodi, and 18.2 MW from Seattle City Light and 4.5 MW from a reserve sharing agreement; and
- 69 MW from WAPA.

Revenue sources for the City's utility system include electric rates and direct installation fees. These fees are collected as a condition of approval of development projects.

The City currently encourages energy conservation through providing information and educational programs that encourage conservation. In addition, Title 24 of the Code of Regulations requires the use of energy-efficient appliances in all new development.

The City of Roseville Electric Master Plan identifies the construction of a 60kV transmission line along Fiddymment Road (see Figure 4.12-3). Actual location of the lines would be determined by the Roseville Electric Department at the time construction of the lines is necessary. Another 60kV line would be extended along the north side of Blue Oaks Boulevard from Fiddymment Road to Woodcreek Oaks Boulevard. An existing line on Woodcreek Oaks Boulevard from Blue Oaks Boulevard going north would be extended from its existing location to the northern boundary of the Plan Area. In order to provide back-up service for the Del Webb site, the City of Roseville Electric Department has installed a temporary 12kV overhead circuit from Foothills Boulevard along the Blue Oaks Boulevard extension. This back-up circuit would be converted to an underground feeder when Blue Oaks Boulevard is fully developed. An electrical substation would be located on a 1.0-acre site within the Diamond Creek property. A major receiving station is also being constructed in Neighborhood D (Woodcreek West).

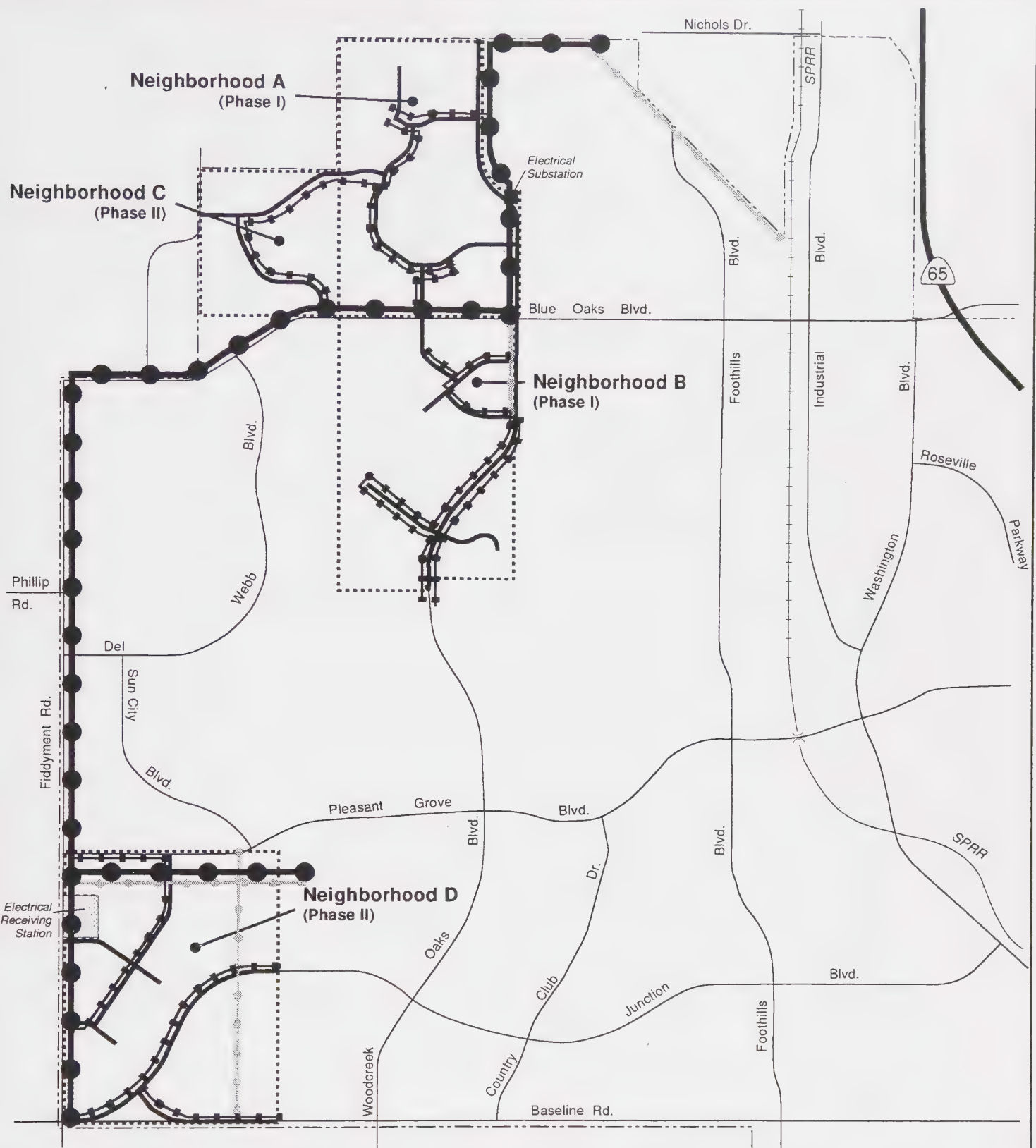
## **NATURAL GAS**

The Pacific Gas and Electric Company (PG&E), a privately-owned and operated utility company, provides natural gas to the City of Roseville. According to PG&E, the average amount of natural gas consumed by single-family dwelling units in the City of Roseville is approximately 800 cubic feet per day (cfd) per unit.<sup>23</sup> Multi-family units are estimated to consume 400 cfd per unit. The peak demand for gas in the City of Roseville is estimated to be approximately 20 million cfd. With a total allocation of gas by PG&E to the City of approximately 50 million cfd or 182,500,00 therms annually in 1994, the City of Roseville has approximately 30 million cfd of natural gas to serve future development in the City. PG&E is currently providing adequate natural gas service throughout the City of Roseville.<sup>24</sup>

The City's ongoing development review process includes a review and comment opportunity for privately-owned utility companies, including PG&E, to allow for informed input from each utility company on all development proposals. The input facilitates a detailed review of all projects by service purveyors to assess the potential demands for utility services on a project-by-project basis. The ability of PG&E to provide its services concurrently with each project is evaluated during the development review process. Funding for gas service is collected through company billings and developer fees put toward the extension of infrastructure to new development.

## **SCHOOLS**

The Plan Area falls within the boundaries of the Roseville Joint Union High School District (RJuHSD), the Dry Creek Joint Elementary School District (DCJESD), and the Roseville City School District (RCSD) (see Figure 4.12-4). These districts and the existing and planned school facilities that would serve the Plan Area are described below.



**Figure 4.12-3**

**Existing And Proposed Electric Lines**

- ..... Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Proposed Roads
- Existing Electrical Lines
- Future Proposed (Underground) 12 kV Electrical Lines
- Future Proposed (Overhead) 60 kV Electrical Lines

0 1/4 1/2  
Scale In Miles



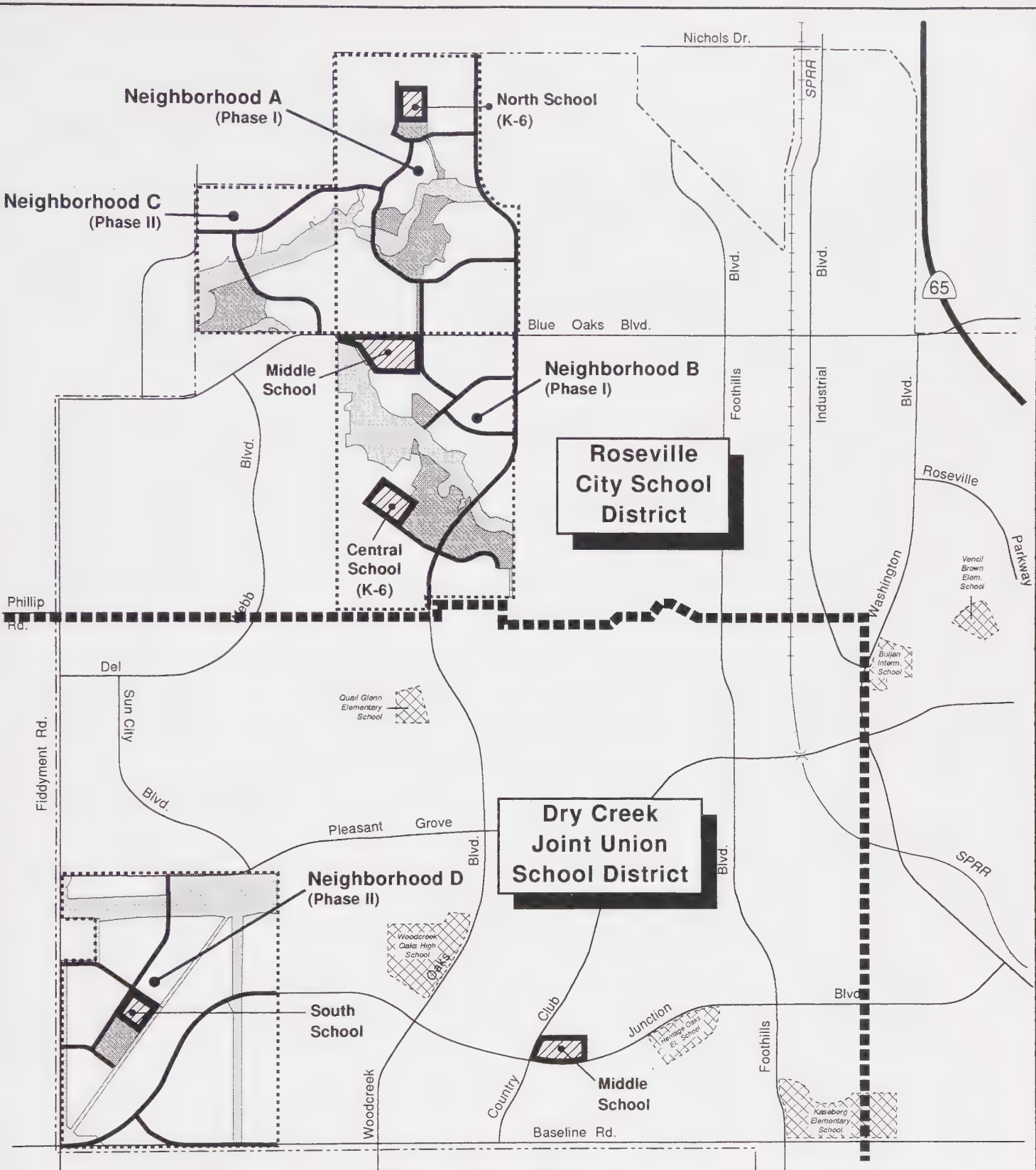
96063  
Base



SOURCE: City of Roseville Electric Department, EIP Associates, May 1997.







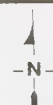
- ..... Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- - - - Proposed Roads
- Proposed Specific Plan School Sites
- Existing School Sites
- School District Boundary
- Open Space
- Parks

SOURCE: Wade Associates, North Roseville Specific Plan Draft, November 10, 1994;  
EIP Associates, May 1997.

**Figure 4.12-4**

## Elementary School District Boundaries and Proposed School Sites

0 1/4 1/2  
Scale In Miles



96063  
Base







### **Roseville Joint Union High School District**

The RJUHSD serves ninth through twelfth grades and receives students from three main elementary school districts, including Roseville City School District, the Dry Creek Joint Elementary School District, and the Eureka School District. The RJUHSD boundaries overlap numerous jurisdictions, including the City of Roseville, Placer County, and Sacramento County. The District boundaries stretch from Folsom Lake on the east, the Sutter County line on the west, Sunset Boulevard in Placer County on the North, and Antelope Road in Sacramento County on the south. Each jurisdiction and plan area has unique characteristics with respect to existing built environment and unique policies guiding future growth.

The RJUHSD currently operates a total of six high schools. As shown in Table 4.12-4 below, current 1996 enrollment in the RJUHSD is approximately 5,094 students, excluding the Adelante and Success schools. The District's capacity is 5,700 students, excluding the Adelante and Success schools. The total school capacity based on the remaining four schools is 89 percent.

The District Facilities Master Plan was adopted by the RJUHSD Board of Trustees on August 14, 1990. Over a ten-year horizon, the plan calls for construction of three comprehensive high schools, two continuation high schools, and one alternative high school.

Since adoption of the plan, Woodcreek High School has been completed and Granite Bay High School is open with an enrollment of 650 students. Site selection for the third comprehensive high school is in progress. One potential site under consideration is located on the west side of Don Julio Boulevard, North of Antelope Road, in Sacramento County.

### **Dry Creek Joint Elementary School District**

The DCJESD encompasses the western portion of the city, as well as areas farther to the west outside of the City of Roseville limits. The district includes five schools, which include the Dry Creek Elementary School, Heritage Oak Starter Elementary School, Antelope Meadows Starter Elementary School, Antelope Crossing Middle School, and the new Quail Glenn school. As shown in Table 4.12-5, the DCJESD is currently operating above capacity. It is currently operating with 4,084 students, which is 116 percent of capacity. The District uses portable buildings to house excess students.<sup>25</sup> Over the last two years, the DCJESD was the fastest-growing school district (percentage-based) in California and was gaining 400 to 600 new students per year.

### **Roseville City School District**

The RCSD provides both elementary and intermediate school facilities for portions of the city. RCSD schools include Vencil Brown, Cirby, Crestmont, Kaseberg, Sergeant, Sierra Gardens, Spanger, Woodbridge, and Eich. According to the RCSD, the District's current capacity is 6,425 and its existing enrollment is 5,282. As presented in Table 4.12-6, the District's current enrollment is 5,282 students. To accommodate overcrowding in the schools and the new class reduction requirement for grades K-3, the school district uses portable classrooms as well as busing children to other schools in the district that have space available.

**TABLE 4.12-4**

**ROSEVILLE JOINT UNION HIGH SCHOOL DISTRICT  
HIGH SCHOOL CAPACITIES AND ENROLLMENT  
(DECEMBER 1996)**

| <b>School</b>         | <b>Maximum Capacity</b> | <b>Current Enrollment</b> | <b>Percent of Capacity</b>   |
|-----------------------|-------------------------|---------------------------|------------------------------|
| Roseville             | 1,600                   | 1,187                     | 74%                          |
| Oakmont               | 1,600                   | 1,440                     | 90%                          |
| Woodcreek             | 1,600                   | 1,565                     | 98%                          |
| Adelante              | N/A                     | 216                       | N/A                          |
| Success               | N/A                     | 36                        | N/A                          |
| Granite Bay           | 900                     | 650                       | 72% (9th & 10th grades only) |
| <b>District Total</b> | <b>5,700</b>            | <b>5,094</b>              | <b>89%<sup>2</sup></b>       |

<sup>1</sup>Current enrollment represents an estimated number of students per Diane Fowler, RJUHSD.

<sup>2</sup>Excluding the Adelante and Success schools.

SOURCE: Roseville Joint Union High School District, 1996.

**TABLE 4.12-5**

**DRY CREEK JOINT ELEMENTARY SCHOOL DISTRICT  
SCHOOL CAPACITIES AND ENROLLMENT  
(DECEMBER 1996)**

| <b>School</b>           | <b>Maximum Capacity</b> | <b>Current Enrollment</b> | <b>Percent of Capacity</b> |
|-------------------------|-------------------------|---------------------------|----------------------------|
| Dry Creek (K-5)         | 323                     | 382                       | 118%                       |
| Heritage Oaks (K-5)     | 750                     | 925                       | 123%                       |
| Antelope Meadows (K-5)  | 750                     | 937                       | 125%                       |
| Antelope Crossing (6-8) | 950                     | 1,229                     | 129%                       |
| Quail Glenn (K-5)       | 750                     | 611                       | 81%                        |
| <b>District Total</b>   | <b>3,523</b>            | <b>4,084</b>              | <b>116%</b>                |

SOURCE: Dry Creek Joint Elementary School District, 1996.

**TABLE 4.12-6**

**ROSEVILLE CITY SCHOOL DISTRICT  
SCHOOL CAPACITIES AND ENROLLMENT  
(NOVEMBER 1996)**

| <b>School</b>         | <b>Maximum<br/>Capacity<sup>1</sup></b> | <b>Current<br/>Enrollment</b> | <b>Percent of<br/>Capacity</b> |
|-----------------------|-----------------------------------------|-------------------------------|--------------------------------|
| Vencil Brown (K-6)    | 600                                     | 335                           | 56%                            |
| Cirby (K-6)           | 719                                     | 654                           | 91%                            |
| Crestmont (K-6)       | 723                                     | 518                           | 72%                            |
| Spanger (K-6)         | 668                                     | 561                           | 84%                            |
| Woodbridge (K-3)      | 354                                     | 344                           | 97%                            |
| Kaseberg (K-6)        | 427                                     | 562                           | 132%                           |
| Sierra Gardens (K-6)  | 660                                     | 560                           | 85%                            |
| Sergeant (K-6)        | 693                                     | 499                           | 72%                            |
| Buljan (7-8)          | 800                                     | 693                           | 87%                            |
| Eich (7-8)            | 781                                     | 556                           | 71%                            |
| <b>District Total</b> | <b>6,425</b>                            | <b>5,282</b>                  | <b>82%</b>                     |

<sup>1</sup>Based on school design, does not include portable classrooms.

SOURCE: Roseville City School District, November 1996.



### **School Facilities Funding and Fees**

Sterling fees are school impact fees collected by elementary and high school districts from new residential, commercial, and industrial projects. These fees are used by school districts to pay for facilities and equipment necessary to accommodate new student enrollment. The current maximum fee authorized by the State is \$1.84 per square foot for new residential construction and \$0.30 per square foot for new commercial/industrial construction. The City of Roseville has acknowledged that State-authorized Sterling fees are insufficient to provide adequate funds to construct new school facilities for students generated by new development. Therefore, alternative funding measures, such as Mello-Roos Community Facilities Districts and infill school fees, have been implemented where a significant need has been found. Mello-Roos Community Facilities Districts supply funding in the Northwest Roseville Specific Plan and North Central Roseville Specific Plan areas.

To ensure adequate funding for new school facilities in order to accommodate substantial new development and population growth within the city, the Roseville City Council adopted Ordinance 2434 (School Facilities Mitigation Plan) in February 1991. This ordinance requires the payment of fees, participation in a Mello-Roos Community Facilities District, and school facility mitigation plans for new development proposed within overcrowded districts. The mitigation fees established in the ordinance may be greater than the State-mandated Sterling Fees. These mitigation fees vary depending upon the school district. Sterling Fees range from a flat \$3.57 per square foot for all new residential development within the DCJESD (\$.012 sf for commercial) to \$4,623 per single family unit within the RCSD. If the applicant chooses to submit a mitigation plan, the plan must explain how the project developer would participate in financing additional interim and permanent school facilities needed to serve the applicant's residential development project. The mitigation plan would be reviewed by the school district(s) in which the project is situated. The district(s) may approve, disapprove, or modify the mitigation plan based upon the funding and facilities needs identified in the construction schedule or plan by each district.

### **LIBRARIES**

While most library systems are operated by county governments, the City of Roseville operates its own library system. According to the City of Roseville General Plan, libraries are viewed by the City as an essential public service and contributing factor to the community's quality of life.

The City of Roseville Main Library is located at 225 Taylor Street, approximately six miles from the Plan Area.<sup>26</sup> The Main Library is approximately 30,000 square feet, but is currently inadequate to serve its users. The Main Library site is constrained for space and cannot accommodate expansion. In addition, the library is located in a floodplain and has experienced flood damage in the past. The City has indicated the need for a new main library which would be larger and better able to accommodate growth, parking, and office space needs.<sup>27</sup>

The City of Roseville also operates a branch library at the Maidu Regional Park located in southeast Roseville. The Maidu Branch is located at 1530 Maidu Drive and is approximately

10,300 square feet. Additional City branch libraries will be located adjacent to the proposed Plan Area within Mahany Park and in the North Central Specific Plan area at the northeast intersection of Roseville Parkway and Eastpark Drive.<sup>28</sup> These planned library facilities will have a floor area of approximately 10,300 square feet.

Together these libraries serve populations from the City of Roseville, as well as the surrounding counties of Placer, Sacramento, El Dorado, Nevada, Yuba and Sutter.

## **PARKS AND RECREATION**

In general, the Plan Area is located within the Sacramento metropolitan region. This location has relatively easy access to the Sierra Nevada mountain ranges, the Central Valley, and the Pacific coast. Locally, recreational opportunities are commonly associated with parkway and river corridors, lakes and reservoirs, and community programs and facilities. The following discussion focusses on the existing parks and recreational facilities provided by the City of Roseville.

The City of Roseville Park has recently adopted the Visions 2010, Comprehensive Parks and Recreation Master Plan. The need for this document was established by the adoption of the Roseville General Plan 2010 in October of 1992. The Comprehensive Parks and Recreation Master Plan, completed in 1995, serves as a reference document for the City of Roseville. It includes baseline data, policies, and recommendations for the day-to-day tasks of the Department, as well as standards for planning future park and recreation facilities.

### **Park Types**

The City has defined parklands to include developed parks, recreational open space, and joint-use park-school facilities. Parklands are further divided to distinguish between traditional ("active") and non-traditional ("open space or passive") parks.

There are 62 active and passive park sites in the city. Twenty-two of the sites are "developed" and 40 are undeveloped or partially developed sites. Parks, public golf courses, and open space areas within the city are managed and maintained by the City's Parks and Recreation Department.

### **Traditional Parks**

Traditional parklands typically provide a variety of active facilities, such as ball fields, multi-use turf areas, hard court areas, and picnic areas. This sort of parkland is classified by the Park Visions 2010 into a hierarchy of park types: Mini, Neighborhood, Neighborhood/Community, Community, City-wide (Regional), and School Recreation Areas.

### **Non-traditional Parks and Recreation Facilities**

The city also contains non-traditional, park/open space areas such as vernal pool preserves, oak woodlands, watershed/riparian areas, and greenbelts. These areas are typically used for passive



recreation and for visual and aesthetic enjoyment. Open space preserves commonly include pathways.

The City operates Diamond Oaks Golf Course, in the north central portion of the city. A second course, Woodcreek Oaks Golf Club, opened in December 1995 in the Northwest Roseville Specific Plan Area. The 18-hole golf course located in the Del Webb Specific Plan is available for public use on a time-available basis.

The Parks and Recreation Department manages pedestrian and bicyclist pathways throughout the City (e.g., along Miners Ravine, Dry Creek, and Linda Creek). The paths are part of a larger planned pathway system which is intended to provide east-west connections within the city, integrate the city with future regional paths, and improve accessibility to the city's creek system.

### **Park Credits for Development**

The City has an adopted park-to-population standard of nine-acres per 1,000 residents. This standard was adopted based on population estimates and demographic characteristics, and was derived from evaluating existing inventory and land needed for future expansion of recreation facilities. Typically, developers include park land in their development plans to meet the City Standard. The nine acres per 1,000 standard is further defined as follows:

- 3 acres Neighborhood/Community Park;
- 3 acres City-wide Park/Community; and
- 3 acres Open Space/Passive.

Currently, park acreage credit can be obtained for any property with recreational value; however, properties with less active recreation value typically receive less credit. A traditional "active" park is normally granted a 1:1 park acreage credit, while non-traditional "passive" parks are granted partial park acreage credits ranging from 10:1 to 5:1.

### **Park Facility Funding**

Parks and recreation facilities are funded through a variety of mechanisms which vary depending on the location of the facility. Roseville Municipal Code Section 4.36, which established the Residential Construction Tax, which was rescinded in February 1996.

The Neighborhood and Community Park Fee is required by Roseville Municipal Code, Chapter 4.37, and varies in amount depending on the neighborhood (and corresponding population) in which the park is located. Like the City-Wide Park Fee (discussed below), this fee increases annually based on the inflation rate for construction costs from the previous year. It is collected from all residential units unless a park fee credit applies. This fee is intended to provide sufficient funds to develop neighborhood and community parks within a specific plan area.

The City-Wide Park Fee was established in 1989 by the Roseville Municipal Code Chapter 4.38. This tax is collected from all new residential dwelling units within the City limits and is adjusted each January 1 based on the inflation rate for construction costs from the previous year. The City-



Wide Park Fee is allocated for large-scale active recreation facilities intended to serve the entire city, typically located within identified city-wide parks.

Park Fee Credits have been allowed pursuant to Roseville Municipal Code Chapter 4.38.06. Park fee credits are granted to developers in specific plan areas in exchange for city-wide property dedication that averages five acres or more per 1,000 residents. The park fee credits may vary by specific plan areas and are increased annually to account for inflation.

### **Placer County**

Areas that are outside of the City limits are provided park services by Placer County. Demand on City recreation services and park facilities corresponds with outlying area population density that is largely due to development. Those areas that are more developed and have higher densities create more demand on City services and facilities. Based on limited available data, approximately 30 to 40 percent of City recreation services and park facilities are used by county residents. The Placer Countywide General Plan identifies several open space and roadway corridors that are integrated with City facilities. For a complete description of county resources, refer to the Placer County Countywide General Plan, Section 5.

Placer County has identified (through policies or master plans) some park sites near the Plan Area. The Dry Creek-West Placer Community Plan identifies a proposed park site approximately one-half mile south of the Baseline Road and Fiddymont Road intersection. Additionally, several open space or roadway corridors have been identified that reflect the important connections of non-traditional parkland and pedestrian/bicycle trail corridors between the Plan Area and Placer County. These connections include a bicycle lane/equestrian hiking trail along Fiddymont Road, and a regional trail corridor along Pleasant Grove Creek, which connects the American River Recreational Area at Beale's Point on Folsom Lake with the Sacramento River in Sutter County.<sup>29</sup>

### **CABLE TELEVISION AND TELEPHONE SERVICES**

Cable television service is provided within the City of Roseville by Jones Intercable. Telephone service is provided by the Roseville Telephone Company, AT&T, or other service providers. The cable and telephone companies are privately-owned and operated. The existing development review process for project proposals includes a review and comment opportunity for privately-owned utility companies, including Jones Intercable and the Roseville Telephone Company. This review and comment opportunity allows service purveyors to assess potential future demands for utility services and the existing access to potential development sites on a project-by-project basis.

Funding for cable and telephone service is collected through company billings and developer fees applied to the extension of infrastructure to new development. According to Jones Intercable, the purchase of materials and labor costs associated with infrastructure extension are paid by the utility company. However, trenching costs attributable to Jones Intercable are the responsibility of the developer. Interior wiring material is supplied to the developer by the utility free of charge. Installation of interior wiring is not provided.

According to the Roseville Telephone Company, the purchase of materials, labor, and trenching costs associated with infrastructure extensions are paid by the utility company. Trenching costs would most likely be paid by the developer initially but would be reimbursed by Roseville Telephone Company. The utility provides one-inch conduit to each dwelling unit. Interior wiring is the responsibility of the developer or home-owner. Roseville Telephone Company can provide interior wiring service; however, their services would need to be separately contracted and are not included when providing service to new development.

#### **4.12.3 REGULATORY SETTING**

The Plan Area is not in the City's water or wastewater service district plans; therefore, it would need to be added to the service districts. This would entail revising the service district plans and submitting them to the State Department of Water Resources for review (the State reviews changes to service district plans, whether they involve adding new areas or changing demand in existing areas). The State would allow several agencies, including the Regional Water Quality Control Board and the State Public Utilities Commission, to review and comment on the changes to the plans.

The City does not require special permits for water distribution, wastewater collection, electrical hook-up, or gas hook-up; however, building permits would be required for these services.

#### **Water and Wastewater**

##### **Federal**

The Federal Clean Water Act (CWA) establishes regulatory requirements for potable water supplies including raw and treated water quality criteria. The City of Roseville is required to monitor water quality and conform to regulatory requirements of the CWA.

##### **State**

The State of California recently enacted legislation (SB 901) which requires that cities and counties assess the adequacy of water supplies to meet the demands of proposed new development projects, including impacts on existing water users, before they approve certain large projects (Government Code § 65302 and Water Code § 10910 et seq).

## **Local**

The City does not require special permits for water distribution, wastewater collection, electrical or gas hook-ups; however, building permits would be required. The City of Roseville General Plan contains General Plan policies relevant to water and wastewater which are listed in Appendix C.

## **Reclaimed Water**

The State of California establishes regulatory requirements for the use of reclaimed water. Title 22, Department of Health Services, Regional Water Quality Control Board and the State Water Resources Control Board.

## **Solid Waste Disposal**

The City's Source Reduction and Recycling Element (SRRE) was prepared to implement the state-mandated waste reduction goals specified in Division 30 of the Public Resources Code (Assembly Bill 939). Division 30 requires local agencies to implement source reduction, recycling, and composting activities to reduce solid waste generation by 25 percent by the year 1995, and by 50 percent by the year 2000. To meet these goals, the SRRE specifies three methods: (1) source reduction, which is a net reduction in waste generation at the source; (2) recycling, which is a reuse of materials to produce new similar products, or different products; and (3) composting, which is a process of biological decomposition of solid organic debris, such as leaves, grass clippings, and other organic material commonly found in the municipal wastestream, to create useable material. The City expects to meet the Division 30 reduction goals of 25 percent by 1995, which would extend the remaining landfill life by 25 percent.<sup>30</sup> Division 30 also requires a projection of solid wastes generated within Roseville through 2005.

## **Natural Gas**

The State Energy Commission regulates energy resources by encouraging, developing and coordinating research and development into energy supply and demand problems to reduce the rate of growth of energy consumption (Warren-Alquist Energy Resources Conservation and Development Act Government Code § 25000 et seq.).

## **Parks and Recreation**

The City of Roseville General Plan establishes a park acreage standard of 9 acres per 1,000 residents. Parks are classified as either "traditional" (active) or "non-traditional" (open space or passive). The City grants a full 1:1 park acreage credit to traditional parks and grants partial credit ranging from a ratio of 10:1 to 5:1 to non-traditional park land. The City does not provide credit towards the park acreage standard for private recreational facilities.



### **Police Services, Fire Protection Services, Electricity, Schools, Libraries, Cable Television and Telephone Services**

The relevant General Plan policies for these services and utilities are listed in Appendix C.

#### **4.12.4 IMPACTS**

With the exception of water supply and wastewater treatment, the public service and utilities this analyses assume that the impacts of the project are fully additive, as though no development would occur in the Plan Area without the NRSP.

#### **Method of Analysis**

Assuming an average of 2.54 persons per household and 1.5 persons per household for the 400 attached units in Eskaton, the population in Phase I is estimated to be approximately 5,992 and 6,541 for Phase II for an estimated Full Project population of 12,533 new residents.

It should be noted that three of the properties in Phase I (Diamond Creek, Eskaton, and Mourier 140) have existing light industrial land use and zoning entitlements. As a result, the water demand and wastewater treatment analysis looks at the impact of the incremental difference in water demand and wastewater treatment of the Proposed Project, over that water demand and wastewater treatment already assumed in City projections for the existing Light Industrial land use. For water, demand from the Light Industrial use (1.35 mgd at buildout) is subtracted from the analysis because this water demand has already been accounted for in the City's current water projections. For wastewater treatment, demand for the Light Industrial (1.26 mgd at buildout) is subtracted from the analysis because this has already been accounted for in the City's current wastewater demand projections.

This analysis assumes that all residential units are added to the City's current unit allocation of 39,200 units. However, some of the Phase I units may be transferred, in which case the projected demand for each public service and utility would be lower than shown in this analysis. For example, if units are transferred, water demand will need to be recalculated in order to avoid double counting.

#### **Domestic Water**

Water demand rates developed in the *General Plan Update Water System Supply Study*, prepared in 1993, have been applied to the land uses proposed in the NRSP to estimate the additional water that would be needed to be supplied by the City of Roseville.<sup>31</sup>

To determine the maximum daily demand, the average daily demand has been multiplied by a peaking factor of 2.0. To determine the peak-hour flow, the maximum daily flow is multiplied by 1.7.

The water demand assumed for the Diamond Creek, Eskaton and Mourier 140 properties (under the current Light Industrial designation) in the General Plan was subtracted from the project demand, because the light industrial water demand is assumed in projections for city-wide demand. This approach prevents double counting water demand for the Diamond Creek, Eskaton and Mourier 140 properties. The resulting incremental change in water demand has been compared to the existing and planned water supply serving the Plan Area to determine impacts.

### Reclaimed Water

Reclaimed water is proposed for irrigation of all parks with the exception of the park on Mourier 140 and open space. The proposed infrastructure for reclaimed water was examined to determine whether it would be adequate to augment or supplant irrigation in the Plan Area.

### Wastewater

The following generation rates have been applied to the land uses proposed in the NRSP to estimate the quantity of wastewater that would be added to the City's collection system:

|                                         |                                       |
|-----------------------------------------|---------------------------------------|
| ■ Residential:                          | 400 gallons per day per dwelling unit |
| ■ Commercial/<br>Business-Professional: | 1,600 gallons per day per acre        |
| ■ Industrial:                           | 2,500 gallons per day per acre        |
| ■ Schools/parks:                        | 1,600 gallons per day per acre        |

To determine the peak daily flow in the collection system, the average daily flow is multiplied by a peaking factor of 2.3.

Because of the way in which the wastewater flows through the conveyance system, the wastewater treatment rates are slightly lower than the transmission flows.<sup>32</sup> The following generation rates have been applied to the land uses proposed in the NRSP to estimate the quantity of wastewater to be treated at the Roseville Regional Wastewater Plant.

|                                         |                                       |
|-----------------------------------------|---------------------------------------|
| ■ Residential:                          | 260 gallons per day per dwelling unit |
| ■ Commercial/<br>Business-Professional: | 1,040 gallons per day per acre        |
| ■ Industrial:                           | 1,560 gallons per day per acre        |
| ■ Schools/parks:                        | 1,040 gallons per day per acre        |

To determine the peak daily flow to be treated, the average daily flow is multiplied by a peaking factor of 2.5.

Like water demand, existing wastewater projections are incorporated into city-wide projections of buildout for wastewater generation. Therefore, the wastewater demand under the light industrial use was subtracted from the project total. This approach prevents double-counting wastewater generation for the Diamond Creek, Eskaton and Mourier 140 properties. The

incremental increase in wastewater has been compared to the existing and planned wastewater treatment capacity serving the Plan Area to determine impacts.

### **Police Services**

The demand for police protection services that would be needed to serve the development identified in the proposed NRSP is discussed qualitatively. The City of Roseville does not have a specific requirement for the ratio of police protection personnel to resident population, so the impact analysis is based on the ability of the Roseville Police Department to adequately serve the residents of Roseville. A ratio of 1.2 officers per 1,000 resident population is used to provide an estimate of the number of additional officers needed to serve the Plan Area.

### **Fire Protection Services**

The Roseville Fire Department does not have an adopted ratio of fire protection personnel to resident population. Instead, the impact analysis is based on the ability of the Roseville Fire Department to provide emergency fire services within four minutes 80 percent of the time, provide basic life support services within four minutes 80 percent of the time, provide advanced life support within four to six minutes 90 percent of the time, and deliver 500 gallons per minute within ten minutes.

### **Solid Waste Disposal**

The annual solid waste generated by the development identified in the proposed NRSP is calculated by applying the current per capita solid waste generation factor to the number of residents that are expected to live in the Plan Area. The current annual solid waste generation factor is 1.26 tons per capita. This generation factor is assumed to include all sources of solid waste, including residential, commercial, office, industrial uses. The additional solid waste generated is compared to existing and planned capacity of the landfill to determine impacts.

### **Electricity**

The average electrical demand from the development identified in the proposed NRSP is calculated by applying the following electrical demand rates to the proposed land uses. The additional electrical demand is compared to existing and proposed entitlements to electricity.

|                          |                                      |
|--------------------------|--------------------------------------|
| ■ Residential:           | 0.0038 MW per year per dwelling unit |
| ■ Commercial:            | 0.0450 MW per year per acre          |
| ■ Business-Professional: | 0.0400 MW per acre                   |
| ■ Schools:               | 0.0080 kW per acre                   |



**Natural Gas**

The average natural gas demand of the development identified in the proposed NRSP is calculated by applying the following natural gas demand rates to the proposed land uses. The additional natural gas demand is compared to existing and planned natural gas facilities to determine impacts.

|                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| ■ Residential:                          | 1,440 Therms per year per dwelling unit |
| ■ Commercial/<br>Business-Professional: | 63,600 Therms per year per acre         |

**Schools**

The demand for school services are based upon the additional number of students generated by the development of urban uses in the NRSP. The assumed student generation rates for the Roseville Joint Union School District are provided in Table 4.12-7.

The student generation rates for the Dry Creek Joint Elementary School District are provided in Table 4.12-8. The student generation rates for the Roseville City School District are provided in Table 4.12-9.

The residential development identified in the NRSP is multiplied by the appropriate student generation rates. Because the age-restricted housing identified in the Plan Area (Eskaton Village, Roseville) is not expected to generate any students, these housing units are not included in the student calculations.

To estimate the number of schools required to serve the additional students, the following students per school estimates are used:

|                      |                |
|----------------------|----------------|
| High School:         | 1,800 students |
| Intermediate School: | 900 students   |
| Elementary School:   | 600 students   |

**Libraries**

The demand for library services needed to serve the increased Roseville resident population resulting from the development of the NRSP is estimated based upon the City of Roseville’s General Plan guidelines for libraries. The impact analysis includes the calculation of additional library building area to serve the anticipated demand. As stated above, the City of Roseville General Plan guideline for libraries includes one new library of approximately 10,300 square feet for every 15,000 to 20,000 residents. As an alternative, the City of Roseville Library Director has indicated that the planned library facilities may be increased in size to accommodate the new residents.<sup>33</sup>

| TABLE 4.12-7                                                      |                                                  |
|-------------------------------------------------------------------|--------------------------------------------------|
| ROSEVILLE JOINT UNION SCHOOL DISTRICT<br>STUDENT GENERATION RATES |                                                  |
| Residential Density                                               | Student Generation Rate<br>(Grades 9 through 12) |
| Single Family                                                     | 0.2362                                           |
| Multi-Family                                                      | 0.0445                                           |
| SOURCE: Roseville Joint Union School District, 1995.              |                                                  |

| TABLE 4.12-8                                                           |                                                       |                                                         |
|------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|
| DRY CREEK JOINT ELEMENTARY SCHOOL DISTRICT<br>STUDENT GENERATION RATES |                                                       |                                                         |
| Residential Type                                                       | Elementary Student<br>Generation Rate<br>(Grades K-5) | Intermediate Student<br>Generation Rate<br>(Grades 6-8) |
| Single Family                                                          | 0.3480                                                | 0.1140                                                  |
| Multi-Family                                                           | 0.1710                                                | 0.0900                                                  |
| SOURCE: Dry Creek Joint Elementary School District, 1995.              |                                                       |                                                         |

| TABLE 4.12-9                                               |                                                       |                                                         |
|------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|
| ROSEVILLE CITY SCHOOL DISTRICT<br>STUDENT GENERATION RATES |                                                       |                                                         |
| Residential Type                                           | Elementary Student<br>Generation Rate<br>(Grades K-6) | Intermediate Student<br>Generation Rate<br>(Grades 7-8) |
| Single Family                                              | 0.3993                                                | 0.1339                                                  |
| Multi-Family                                               | 0.1193                                                | 0.0400                                                  |
| SOURCE: Roseville City School District, 1995.              |                                                       |                                                         |

## **Parks and Recreation**

The amount and type of park acreage included in the Plan have been compared to the standards established in the Parks Visions 2010 Master Plan. The following factors have been applied to determine the park acreage required to be supplied by the NRSP.

- 3.0 acres of Neighborhood/Community Park land per 1,000 residents;
- 3.0 acres of City-wide Park/Community Park land per 1,000 residents; and
- 3.0 acres of Open Space/Passive land per 1,000 residents.

## **Cable Television and Telephone Services**

The demand for additional cable television and telephone service is anticipated as the development of the Plan Area occurs. For this analysis, each dwelling unit is anticipated to require one cable television and one telephone connection. Because the Plan does not define the number of commercial structures that would be developed within the Plan Area, one cable television and telephone connection is anticipated per each gross acre of non-residential use, excluding parks and open space. While estimates of the additional new cable television and telephone services are calculated, the impact on the service providers is qualitatively discussed.

## **Standards of Significance**

Implementation of the proposed NRSP would be considered to create a significant impact if any of the following could occur within Phase I or the Full Project:

- The estimated water demand would be greater than the anticipated supply, or the treatment, storage or distribution systems would be unable to serve the project;
- The Proposed Project would result in a need for new or substantially altered facilities or services;
- The Proposed Project would be inconsistent with relevant General Plan policies;
- The projected quantity of wastewater generated by the NRSP would exceed the City's collection, treatment and disposal capacities;
- The increased demand for police protection substantially interfered with the ability of the police department to provide adequate service;
- The increased demand for fire protection services would substantially interfere with the ability of the fire department to provide adequate service;
- The Proposed Project would generate enough solid waste to exceed landfill capacity or substantially shorten the life of the landfill;



- The Proposed Project would demand more electricity than the current or planned City entitlements;
- The Proposed Project would generate a demand for natural gas that exceeds the existing or planned natural gas transmission facilities;
- Students in the NRSP could not be accommodated by existing or planned school capacity;
- The increased demand for the provision of library services would exceed the current or planned level of library services;
- The Proposed Project does not include the dedication of an adequate supply of land to new park facilities; or
- The NRSP would generate a demand for cable television and telephone service that exceeds the existing or planned cable television and telephone service facilities.

As discussed in the Methods section, City water and wastewater demand assume that 1.35 mgd of water and 1.26 mgd of wastewater would be generated by development of light industrial uses on the Diamond Creek, Eskaton and Mourier 140 properties. This is a unique situation in the NRSP due to the fact there is an existing land use designation for three of the properties. Therefore, the water and wastewater analyses calculate project demand, then subtract demand assumed for the light industrial designations in order to determine the incremental increase in demand over existing City projections. This approach prevents double-counting.

## PHASE I IMPACTS

### Water, Reclaimed Water, and Wastewater

|                            |                                             |
|----------------------------|---------------------------------------------|
| <b>IMPACT 4.12-1(A):</b>   | <b>Increased demand for domestic water.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                       |
| <b>MITIGATION MEASURE:</b> | None required                               |

As shown in Table 4.12-10, Phase I would generate a net demand for approximately 0.5 mgd. The land uses proposed for Phase I would generate demand for approximately 2.15 mgd. However, reclaimed water would supplant potable water for irrigation of several parks, reducing the Phase I demand by 0.30 mgd. When this reclaimed water use and the projected demand for the existing light industrial designations (1.35 mgd) are subtracted from gross project demand, net project demand is 0.5. Eskaton has indicated that it could use up to 100,000 gpd of reclaimed water for irrigation, which would further reduce project demand.

It should be noted that the Diamond Creek, Eskaton and Mourier properties by themselves would generate demand for water of 1.39 mgd under the Proposed Project, only 45,000 gpd more than the light industrial designations. If Eskaton used 45,000 gpd of reclaimed water, there would not

TABLE 4.12-10

## PHASE I WATER DEMAND

| Planned Parcel                    | Acres | Density | Units | Water Demand Factor<br>(average day) | Total Demand | Reclaimed Usage | Adjusted Demand <sup>1</sup> |
|-----------------------------------|-------|---------|-------|--------------------------------------|--------------|-----------------|------------------------------|
| Diamond Creek                     |       |         |       |                                      |              |                 |                              |
| DC-1, LDR                         | 79.8  | 4.5     | 361   | 760                                  | 274,360      |                 |                              |
| DC-2, LDR                         | 28.7  | 4.7     | 136   | 760                                  | 103,360      |                 |                              |
| DC-3, LDR                         | 2.5   | 4       | 10    | 760                                  | 7,600        |                 |                              |
| DC-4, LDR                         | 20.1  | 4       | 80    | 760                                  | 60,800       |                 |                              |
| DC-5, LDR                         | 11.5  | 4       | 46    | 760                                  | 34,960       |                 |                              |
| DC-6, LDR                         | 30.4  | 3.9     | 120   | 760                                  | 91,200       |                 |                              |
| DC-7, MDR                         | 9.3   | 7.7     | 72    | 555                                  | 40,752       |                 |                              |
| DC-8, HDR                         | 10    | 18      | 180   | 190                                  | 34,200       |                 |                              |
| DC-9a, LDR                        | 5.8   | 1.2     | 7     | 922                                  | 6,454        |                 |                              |
| DC-30, Community Commercial       | 4.1   |         |       | 2678                                 | 10,980       |                 |                              |
| DC-31, Community Commercial       | 18.9  |         |       | 2678                                 | 50,614       |                 |                              |
| DC-32, Business Professional      | 4.4   |         |       | 2678                                 | 11,783       |                 |                              |
| DC-50, North School Park (Rchmd)  | 41    |         |       | 3881                                 | 15,912       | 15,912          |                              |
| DC-51, Diamond Creek Park (Rchmd) | 4     |         |       | 3881                                 | 15,524       | 15,524          |                              |
| DC-52, Diamond Creek Park (Rchmd) | 6.1   |         |       | 3881                                 | 31,436       | 31,436          |                              |
| DC-53, Diamond Creek Park (Rchmd) | 10.8  |         |       | 3881                                 | 41,915       | 41,915          |                              |
| DC-54 Diamond Creek Park (Rchmd)  | 7.8   |         |       | 3881                                 | 29,496       | 29,496          |                              |
| DC-70, Elementary School          | 8     |         |       | 3881                                 | 31,048       |                 |                              |
| Diamond Creek Totals              | 312.1 |         | 1102  |                                      | 892,394      | 134,283         | 758,111                      |
| Eskaton                           |       |         |       |                                      |              |                 |                              |
| Eskaton Totals                    | 60.8  |         |       |                                      | 202,700      |                 | 207,700                      |
| Mourier 140                       |       |         |       |                                      |              |                 |                              |
| M-1, HDR                          | 4.8   | 19.8    | 95    | 190                                  | 18,050       |                 |                              |
| M-2, MDR                          | 96    | 9.1     | 87    | 425                                  | 36,975       |                 |                              |
| M-3, LDR                          | 9.4   | 6.6     | 62    | 566                                  | 35,092       |                 |                              |
| M-4, LDR                          | 185   | 5.5     | 101   | 685                                  | 69,185       |                 |                              |
| M-5, LDR                          | 20    | 5.3     | 106   | 685                                  | 72,610       |                 |                              |
| M-6, LDR                          | 17    | 5       | 85    | 760                                  | 64,600       |                 |                              |

TABLE 4.12-10

## PHASE I WATER DEMAND

| Planned Parcel                       | Acres | Density | Units | Water Demand Factor (average day) | Total Demand | Reclaimed Usage | Adjusted Demand <sup>1</sup> |
|--------------------------------------|-------|---------|-------|-----------------------------------|--------------|-----------------|------------------------------|
| M-30, Community Commercial           | 106   |         |       | 2678                              | 28,387       |                 |                              |
| M-31, Community Commercial           | 4.1   |         |       | 2678                              | 10,980       |                 |                              |
| M-50, Park                           | 2.7   |         |       | 3881                              | 10,479       |                 |                              |
| M-70, Jr High School                 | 22.3  |         |       | 3881                              | 86,546       |                 |                              |
| Right of Way                         | 18.1  |         |       | 0                                 | -            |                 |                              |
| Mourier 140 Totals                   | 140.5 |         | 536   |                                   | 432,904      |                 | 432,904                      |
| Woodcreek North                      |       |         |       |                                   |              |                 |                              |
| WN-1, LDR                            | 30    | 3       | 89    | 922                               | 82,058       |                 |                              |
| WN-2, LDR                            | 20    | 4.8     | 96    | 760                               | 72,960       |                 |                              |
| WN-3, LDR                            | 29.1  | 3.7     | 109   | 760                               | 82,840       |                 |                              |
| WN-4, LDR                            | 29.6  | 4.8     | 143   | 760                               | 108,680      |                 |                              |
| WN-5, LDR                            | 23.1  | 6       | 138   | 566                               | 78,108       |                 |                              |
| WN-50, Park (Reclaimed)              | 26    |         |       | 3881                              | 100,906      | 100,906         |                              |
| WN-51, Park (Reclaimed)              | 15.9  |         |       | 3881                              | 61,708       | 61,708          |                              |
| WN-70, Elementary School             | 8     |         |       | 3881                              | 31,048       |                 |                              |
| Right of Way                         | 6.6   |         |       | 0                                 | -            |                 |                              |
| Woodcreek North Totals               | 232.9 |         |       |                                   | 618,308      | 162,614         | 455,694                      |
|                                      |       |         |       |                                   |              |                 |                              |
| Phase 1 Total <sup>2</sup>           | 736.3 |         | 2,123 |                                   | 2,146,306    | 296,897         | 1,849,409                    |
| Demand Light Industrial <sup>3</sup> | 503.4 |         |       | 2,678                             | 1,348,105    | 0               | 1,348,105                    |
| Net Demand <sup>4</sup>              |       |         |       |                                   |              |                 | 501,305                      |

## NOTES

<sup>1</sup> Reclaimed water subtracted from total demand<sup>2</sup> Includes Woodcreek North, which is 233 acres designated Urban Reserve, and the Diamond Creek, Eskaton and Mourier properties, which combined are 503 acres.<sup>3</sup> Based on light industrial designation for Diamond Creek, Eskaton and Mourier 140<sup>4</sup> Phase I demand in excess of assumed light industrial demand



be an increase in demand over anticipated light industrial demand for the Diamond Creek, Eskaton and Mourier 140 properties.

As stated in the Setting, anticipated citywide average water demand would be 40.0 mgd at buildout without Phase I of the Proposed Project. With Phase I, demand would increase to 40.5 mgd. The City is entitled to 55.3 mgd of domestic water from the USBR and PCWA. Because City entitlements exceed projected average demand with Phase I at buildout, the increased demand for water is considered a less-than-significant impact.

|                            |                                                        |
|----------------------------|--------------------------------------------------------|
| <b>IMPACT 4.12-2(A):</b>   | <b>Increased demand for domestic water conveyance.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                  |
| <b>MITIGATION MEASURE:</b> | None required                                          |

As discussed above, under the City's current contract with the USBR, the maximum amount of water that can be conveyed to the City is 42 mgd. The City's current maximum daily water demand is 39 mgd. By buildout, maximum water demand is projected to be 80.0 mgd without the Proposed Project, which would exceed the capacity of existing conveyance facilities. Phase I of the Proposed Project would create a net increase in maximum water demand of 1.0 mgd, which would increase City demand to 81.0 mgd.

The existing conveyance system has certain limitations that prevent the delivery of a portion of the approximately 30,000 acre-ft year from the PCWA, (as discussed in the Setting). To obtain additional water, the City of Roseville along with the City of Folsom and the San Juan Water District are pursuing negotiations with the USBR to obtain additional access to water through Folsom Dam by modifying the current contract allotment and upgrading the Folsom Dam Pumping facility to handle greater conveyance and installing a new raw water line for transmission. The pumping facility would increase conveyance capacity from the current 42 mgd to 96 mgd. The project is still in the design phase and the City anticipates conducting the environmental review sometime in 1997. The upgrade to the facility is anticipated to be operational before the Year 2000, which would provide adequate conveyance to buildout of Phase I (expected to occur prior to 2010). In addition, guidelines contained within the NRSP would tie funding of improvements to the land owners in the Plan Area on a fair-share basis. Because the City's conveyance capacity will be adequate to serve the Proposed Project before Phase I is occupied, this impact is considered less than significant.

|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| <b>IMPACT 4.12-3(A):</b>   | <b>Decreased water supply during drought periods.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                 |
| <b>MITIGATION MEASURE:</b> | None required                                         |

In an event similar to the seven-year drought that occurred in the late 1980s and early 1990s, the development of Phase I would result in a more severe water shortage than has occurred in the past.

The City is continuing its efforts to secure the conveyance of currently contracted potable water, as discussed under Impact 4.12-1(A). In addition, the City is implementing reuse of treated wastewater for irrigation of public parks which would allow more potable water to be used for residential and commercial purposes. The City is also promoting the widespread implementation of water conservation techniques through public education programs and the implementation of Title 24 of the California Code of Regulations. Title 24 requires all new development projects to comply with water conservation measures by including, among other requirements, low-flow showers and toilets. In addition, the City has prepared a Water Conservation and Drought Mitigation Plan to better respond to drought conditions. The General Plan contains the following policies to address water supply and drought conditions:

- FI-5. Develop and adopt a landscape ordinance that provides standards for the use of drought tolerant, xeriscape and water conserving landscape practices for both public and private projects.
- FI-6. Develop and implement public education programs designed to increase public participation in energy and water conservation.
- FI-7. Require large water and electricity users to submit a use and conservation plan concurrent with development review specifying measures to be taken to minimize demand.

Policy FI-5 has been implemented in the City through the Water Efficient Landscape Requirements. All new landscaping must comply with the Water Efficient Landscape Requirements. These measures, along with the implementation of the Roseville Conservation and Drought Mitigation Plan, would reduce the impact of Phase I on the water supply during drought conditions to a less-than-significant level.

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>IMPACT 4.12-4(A):</b>      | <b>Increased demand for domestic water treatment.</b>                  |
| <b>SIGNIFICANCE:</b>          | Significant                                                            |
| <b>MITIGATION MEASURE:</b>    | 4.12-1 (Restrict development until water treatment capacity increases) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                  |

The City of Roseville Water Treatment Plant has recently been expanded and can supply 48 mgd of potable water. However, as stated above, by buildout, the demand for treated water is expected to reach 80.0 mgd. This demand would exceed existing capacity, and the added Phase I maximum demand of 1.0 mgd would exacerbate the shortfall. By buildout, citywide maximum daily demand would reach 81.5 mgd with Phase I of the Proposed Project.

A 12 mgd expansion of the City's treatment plant is planned for completion by 2001, bringing the treatment capacity to 60 mgd. A second 12 mgd expansion is planned for 2010 or 2011, bringing treatment capacity to 72 mgd. The City intends to collect additional fees to fund expansion of the plant beyond 72 mgd.<sup>34</sup>

The alternatives for expanding the City's water treatment capacity depend on the City water supply selected. If the Folsom Lake or Below Folsom Lake Supply Alternative is selected, then



the additional treatment capacity required would need to be provided by expanding the existing Roseville Water Treatment Plant (WTP). The WTP could be expanded in 6 mgd increments up to a maximum of 96 mgd, which would be enough to meet the Proposed Project's maximum peak day water demand. This would depend on the potential for land acquisition and the placement of additional storage reservoir(s) at the WTP site. Raw water conveyance facilities from Folsom Lake would also need to be expanded in order to provide an adequate water supply to the WTP. These facilities are currently under design.

If the PCWA Supply Alternative is selected, then additional treatment capacity could be provided by PCWA facilities. In order to provide PCWA water to the City, either the existing WTP would need to be expanded or a new West Placer Water Treatment Plant could be constructed. Expanding the Foothill WTP would require the installation of a major water pipeline to the plant and significant expansion over the plant's existing capacity. Because of site constraints, it is unlikely that both Roseville's and PCWA's future water supply needs could be met by expanding the Foothill WTP. Therefore, a new West Placer WTP may be required either in addition to expanding the Foothill WTP or in place of it. The new WTP is part of PCWA's Capital Improvement Plan.

By restricting development until water treatment capacity is available, this impact would be considered less than significant.

|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| <b>IMPACT 4.12-5(A):</b>   | <b>Increased demand on water distribution system.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                 |
| <b>MITIGATION MEASURE:</b> | None required                                         |

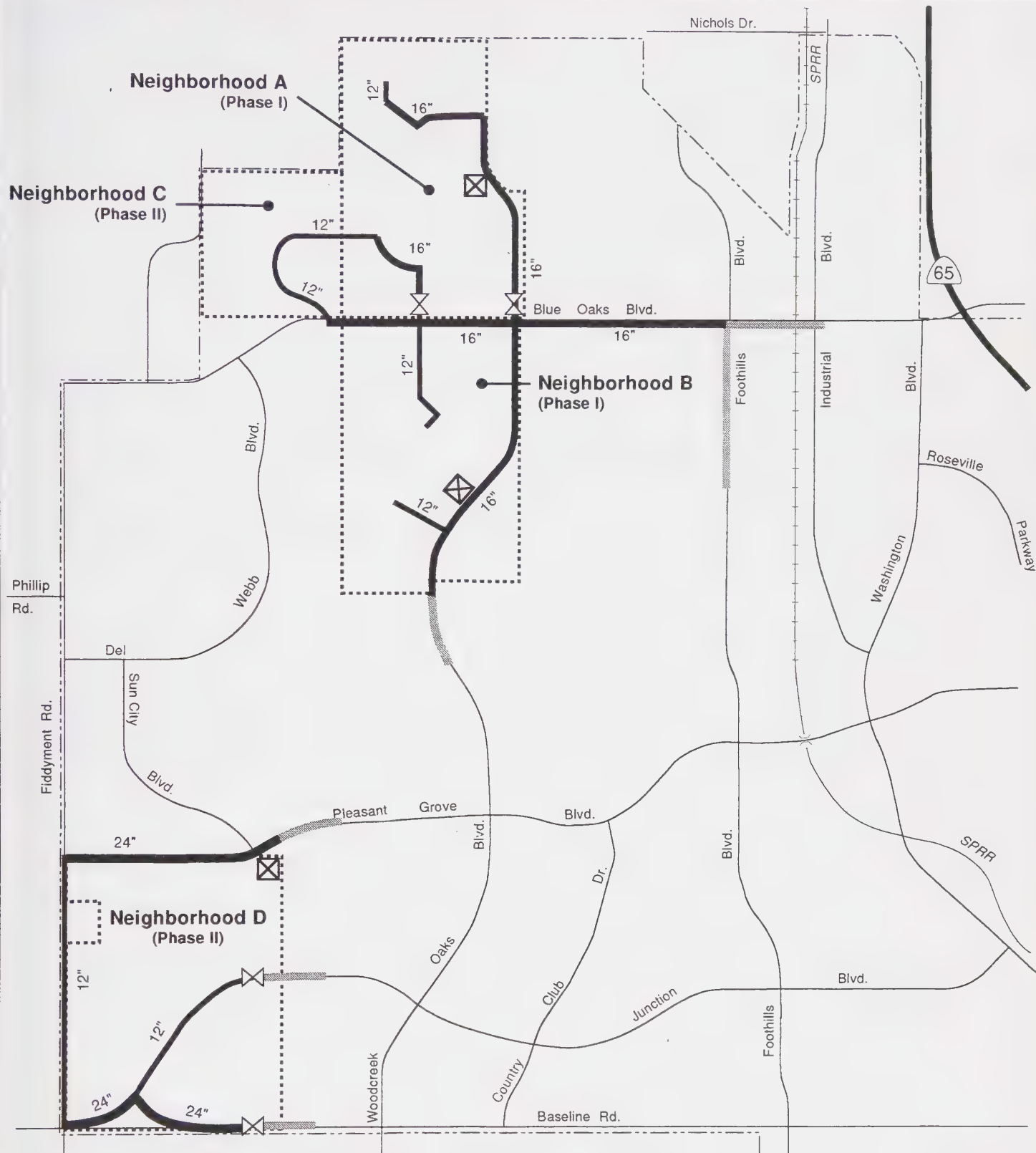
Although the final design process would determine the sizes of all water mains and pipes in the Plan Area, a preliminary design of the water distribution improvements necessary to serve the Plan Area has been prepared. The location of the Plan Area makes it feasible to connect directly to the City's existing water system infrastructure system on the west side of the city.

The conceptual water distribution system for Phase I of the Plan Area, indicating the location and size of the water lines and the points of connection with the existing system, is shown in Figure 4.12-5. The northern portion of Phase I would connect with two existing water mains. A 16-inch main would be extended north from the existing main in Woodcreek Oaks Boulevard and the existing 24-inch water main in Blue Oaks Boulevard would be extended west to Woodcreek Oaks Boulevard as part of the improvements required for the Del Webb Specific Plan. A 16-inch line would extend through Neighborhood A (Diamond Creek) and a 12-inch line would extend into Neighborhood B (Woodcreek North) off of the 16-inch line in Woodcreek Oaks Boulevard. A 12-inch line would connect Mourier 140 off the 24-inch line in Blue Oaks Boulevard. These pipelines would adequately serve the Plan Area.

The City of Roseville has identified several improvements to its water transmission and distribution system that would be required to deliver water to future development in the City. This includes two pressure reducing stations north of Blue Oaks Boulevard to serve Neighborhoods A, B and C (Diamond Creek, Mourier 140, Woodcreek North, and Walaire 160



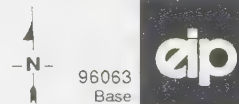




**Figure 4.12-5**  
**Proposed Water Lines**

- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Proposed Water Main
- Existing Water Main
- X Pressure Release Valve
- X Wells

0 1/4 1/2  
 Scale In Miles



SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996;  
 EIP Associates, May 1997.





properties). Completion of these improvements and the placement of the water mains in the Plan Area, as identified in Phase I of the proposed NRSP, would result in a less-than-significant impact on the existing water distribution system.

|                            |                                          |
|----------------------------|------------------------------------------|
| <b>IMPACT 4.12-6(A):</b>   | <b>Residual discharges to Dry Creek.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                    |
| <b>MITIGATION MEASURE:</b> | None required                            |

The Proposed Project would discharge wastewater to the City of Roseville Wastewater Treatment Plant (WWTP). The wastewater that would be generated by Phase I would be limited to non-industrial discharges. Phase I would contribute a maximum daily flow of 1.26 mgd to the WWTP for treatment, which discharges treated water to Dry Creek. Because the Proposed Project would use reclaimed water to irrigate parks and other public spaces, a portion of the amount of treated wastewater would not be discharged into Dry Creek. Because any discharge from the City's WWTP into Dry Creek must comply with stringent federal and State water quality standards, it is reasonable to assume that reclaimed water would meet the standards set forth in the Basin Plan. The Proposed Project would not discharge reclaimed water directly into Dry Creek.

Reducing the wastewater discharge rate into Dry Creek by reusing treated wastewater for irrigation is considered a beneficial effect because this would reduce the amount of relatively warm, treated water discharged into the creek, which could benefit fish populations in the creek. In addition, the Regional Water Quality Control Board National Pollutant Discharge Elimination System (NPDES) permit includes a dry weather discharge limit of 18 mgd into Dry Creek (see Section 4.4, Hydrology and Water Quality). Using reclaimed water assists in keeping this limit from being reached.

|                            |                                         |
|----------------------------|-----------------------------------------|
| <b>IMPACT 4.12-7(A):</b>   | <b>Reduced demand on potable water.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                   |
| <b>MITIGATION MEASURE:</b> | None required                           |

The Proposed Project includes the placement of infrastructure to be used for reclaimed water, which would reduce the demand for potable water for irrigation of parks and landscaping. This impact is considered beneficial as the potable water would be conserved, extending the City's water supply during emergency conditions or periods of drought.

|                            |                                          |
|----------------------------|------------------------------------------|
| <b>IMPACT 4.12-8(A):</b>   | <b>Increased use of reclaimed water.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                    |
| <b>MITIGATION MEASURE:</b> | None required                            |

As discussed in the Setting, existing wastewater lines outside of the Plan Area have been converted by the City into reclaimed water lines. The City's reclaimed water distribution system would use an existing sewer force main that would be abandoned after construction of a new force main. Infrastructure plans for the Proposed Project include connecting to the City's

reclaimed water lines and installing 8-inch and 12-inch reclaimed water lines to be used for irrigating parks and possibly landscaping at Eskaton (see Figure 4.12-1). In Phase I, a 24-inch force main would connect Pump Station No. 1 and 2. The existing 18-inch force main would then be cleaned and used to convey reclaimed water north to Pump Station No. 1. Lateral lines would be extended from the 18-inch line to provide reclaimed water to Neighborhoods A and B (Diamond Creek, Eskaton, Woodcreek North, and Mourier 140 properties).

Phase I would require a maximum daily water demand of approximately 0.30 mgd of water to irrigate parks. Eskaton could use up to an additional 0.10 mgd. To meet this demand, reclaimed water from the City's Wastewater Treatment Plant would be used for irrigation. Because the NRSP includes the infrastructure for reclaimed water lines, and the City can provide up to 6.0 mgd of reclaimed water, any impact on the reclaimed water distribution system would be considered less than significant.

|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| <b>IMPACT 4.12-9(A):</b>   | <b>Increased demand on wastewater collection system.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                    |
| <b>MITIGATION MEASURE:</b> | None required                                            |

As shown in Table 4.12-11, the buildout of Phase I would increase average wastewater flows in the collection system by approximately 1.26 mgd and peak daily wastewater flows by 2.91 mgd. Because the City has already projected wastewater generation of Phase I under its current light industrial zoning, the net increase in maximum daily wastewater flows to the WWTP would be the difference between what has already been accounted for and the Proposed Project. Development of the 503 acres currently zoned for light industrial uses in Phase I (Diamond Creek, Eskaton, Woodcreek North, and Mourier 140 properties) would generate a maximum daily wastewater flow of 2.91 mgd. The net Phase I increase would be only 0.01 mgd. This slight increase could be accommodated in planned citywide collection system improvements.

The Proposed Project includes sewer system improvements that would allow the wastewater to be pumped to the existing plant or gravity flow to the west if a regional sewer treatment plant on Pleasant Grove Creek is constructed. The proposed sewer improvements for the NRSP are shown in Figure 4.12-6. All sewer improvements would comply with the Regional Wastewater Master Plan.

The wastewater conveyance system would be designed during the final design process. Therefore, the appropriate system size has not been determined. However, the NRSP contains the following policy:

**6.15. Public Facilities and Services**

- 2: Landowners will participate, to the extent of their fair share, in city-wide mechanisms adopted to finance the collection and treatment of wastewater.

**TABLE 4.12-11  
PHASE I  
NORTH ROSEVILLE SPECIFIC PLAN  
WASTEWATER GENERATION  
IN CONVEYANCE SYSTEM**

| <b>Proposed<br/>Land Use<br/>Category</b>   | <b>Number of<br/>Units/Acres</b> | <b>Wastewater<br/>Generation Factor<br/>(average gpd)</b> | <b>Estimated<br/>Wastewater<br/>Generation<br/>(average<br/>mgd)</b> | <b>Maximum<br/>Daily<br/>Wastewater<br/>Flow (mgd)<sup>1</sup></b> |
|---------------------------------------------|----------------------------------|-----------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------|
| Residential                                 | 2,523 units                      | 400 gpd per<br>dwelling unit                              | 1.00                                                                 | 2.32                                                               |
| Commercial/<br>Business<br>Professional     | 42.1 acres                       | 1,600 gpd per acre                                        | .07                                                                  | .16                                                                |
| Schools                                     | 38.3 acres                       | 1,600 gpd per acre                                        | .06                                                                  | .14                                                                |
| Parks                                       | 79.2 acres                       | 1,600 gpd per acre                                        | .13                                                                  | .29                                                                |
| <b>TOTAL PHASE I GENERATION<sup>2</sup></b> |                                  |                                                           | <b>1.26 mgd</b>                                                      | <b>2.91 mgd</b>                                                    |
| Light Industrial<br>Generation <sup>3</sup> | 503.4 acres                      | 2,500 gpd per acre                                        | 1.26 mgd                                                             | 2.9 mgd                                                            |
| <b>NET PHASE I GENERATION</b>               |                                  |                                                           | <b>0</b>                                                             | <b>0.01 mgd</b>                                                    |

<sup>1</sup> 2.3 times the average daily flow

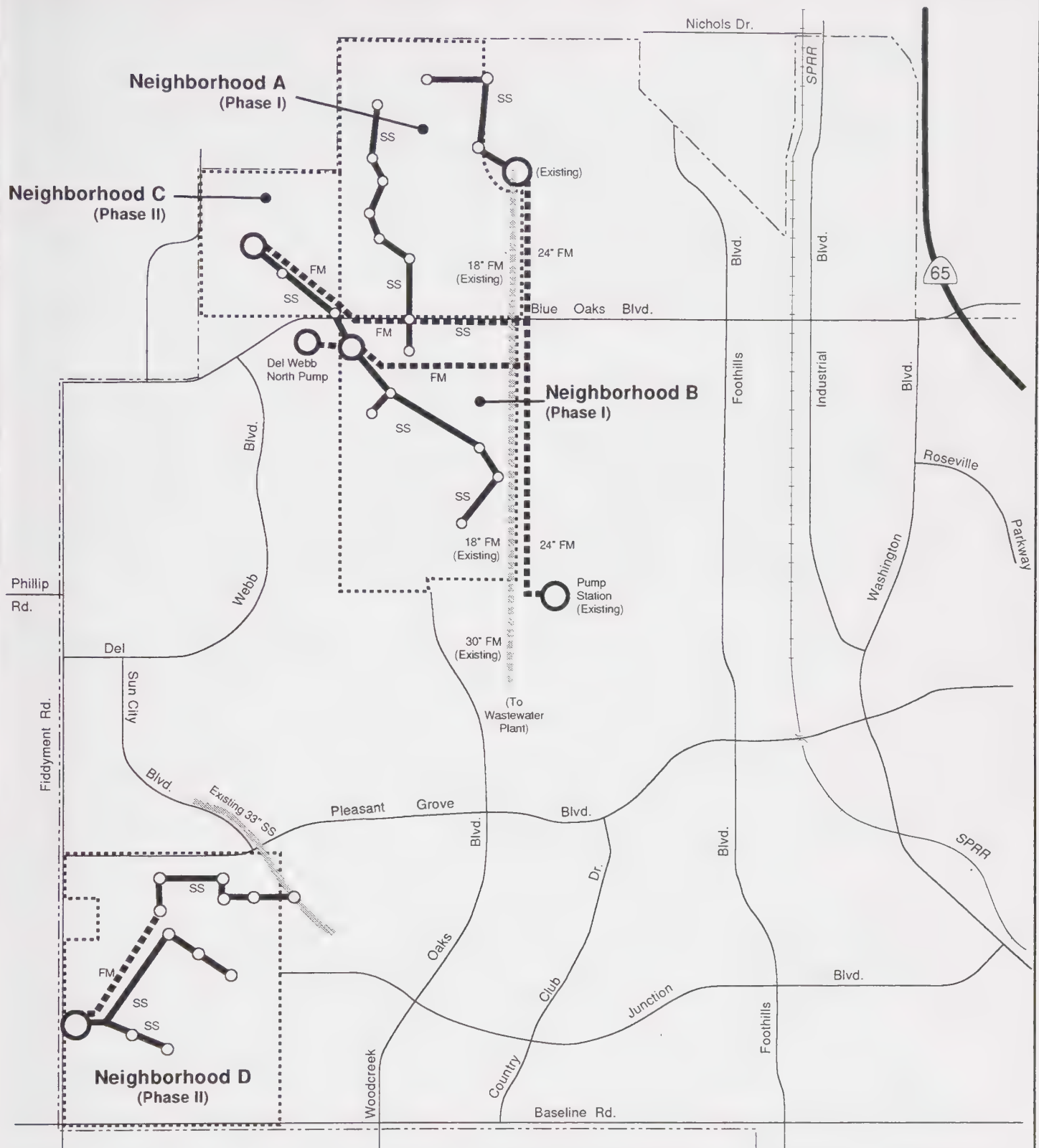
<sup>2</sup> Includes Woodcreek North, which is 233 acres designated Urban Reserve, and the Diamond Creek, Eskaton and Mourier properties, which combined are 503 acres.

<sup>3</sup> City projections of wastewater generation assume buildout of the Light Industrial designations on the Diamond Creek, Eskaton and Mourier 140 properties.

SOURCE: City of Roseville, 1996; EIP Associates, 1996.







- ..... Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Existing and Approved Roads
- Proposed Wastewater Line (Sanitary Sewer (SS))
- Force Main (FM)
- Pump Station

SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996;  
EIP Associates, May 1997.

**Figure 4.12-6**

## Proposed Wastewater Lines

0 1/4 1/2  
Scale In Miles



96063  
Base







Implementation of both the conveyance system shown in Figure 4.12-6 and the NRSP policy listed above would ensure that impacts on the wastewater collection system are less than significant.

|                            |                                                         |
|----------------------------|---------------------------------------------------------|
| <b>IMPACT 4.12-10(A):</b>  | <b>Increased demand on wastewater treatment system.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                   |
| <b>MITIGATION MEASURE:</b> | None required                                           |

As shown in Table 4.12-12, Phase I of the Proposed Project would generate an average of 0.74 mgd of wastewater to be treated, and a maximum of 1.86. Existing capacity at the wastewater treatment plant could accommodate this amount of wastewater. The City has also projected wastewater treatment demand through buildout of the General Plan. The future wastewater generation projections assume that the existing light industrial designations on the Diamond Creek, Eskaton and Mourier 140 properties would be developed. As shown in Table 4.12-12, wastewater generation from the light industrial uses would be 0.79 mgd average and 1.98 mgd maximum. Therefore, the Proposed Project would reduce the amount of wastewater generated in the Phase I portion of the Plan Area.

Because the Proposed Project would reduce the amount of wastewater projected to require treatment at buildout, this is considered a less-than-significant impact.

### **Police Services**

|                               |                                                                             |
|-------------------------------|-----------------------------------------------------------------------------|
| <b>IMPACT 4.12-11(A):</b>     | <b>Increased demand for police protection services.</b>                     |
| <b>SIGNIFICANCE:</b>          | Significant                                                                 |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.12-2 (Increase number of police officers in beat area) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                       |

According to the RPD, the increased resident population resulting from the implementation of Phase I would result in an increased demand for police protection services. Phase I would contribute approximately 5,992 new residents to the area. It is expected that sheriff services would continue to be adequate to serve the unincorporated areas.

The buildout of Phase I would increase the demand for police services in two ways. First, the additional residents and business in the City of Roseville would increase the need for traffic enforcement. This increase alone would not result in a significant impact on the ability of the department to provide services. The RPD also expects that the development of the Plan Area would increase the number of emergency and non-emergency calls for police service.

In order to maintain the existing police to population estimates, additional officers would be needed to accommodate the increased resident population. Assuming a ratio of 1.2 officer per 1,000 residents, the buildout of the Plan Area would require the addition of approximately 7 new officers to the Roseville Police Department. Additional non-sworn support positions, especially

**TABLE 4.12-12  
PHASE I  
NORTH ROSEVILLE SPECIFIC PLAN  
WASTEWATER GENERATION**

| <b>Proposed Land Use Category</b>                                                                                                                                                                                                                                                                                                                                                                  | <b>Number of Units/Acres</b> | <b>Wastewater Generation Factor (average gpd)</b> | <b>Estimated Wastewater Generation (average mgd)</b> | <b>Maximum Daily Wastewater Flow<sup>1</sup> (mgd)</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------|------------------------------------------------------|--------------------------------------------------------|
| Residential                                                                                                                                                                                                                                                                                                                                                                                        | 2,523 units                  | 260 gpd per dwelling unit                         | .66                                                  | 1.65                                                   |
| Commercial/<br>Business<br>Professional                                                                                                                                                                                                                                                                                                                                                            | 42.1 acres                   | 1,040 gpd per acre                                | .04                                                  | .11                                                    |
| Schools                                                                                                                                                                                                                                                                                                                                                                                            | 38.3 acres                   | 1,040 gpd per acre                                | .04                                                  | .10                                                    |
| <b>TOTAL PHASE I GENERATION<sup>2</sup></b>                                                                                                                                                                                                                                                                                                                                                        |                              |                                                   | <b>.74 mgd</b>                                       | <b>1.86 mgd</b>                                        |
| Light Industrial                                                                                                                                                                                                                                                                                                                                                                                   | 503.4                        | 1,560 gpd per acre                                | .79                                                  | 1.98                                                   |
| <b>Net Phase I Generation<sup>3</sup></b>                                                                                                                                                                                                                                                                                                                                                          |                              |                                                   | <b>-.05</b>                                          | <b>-0.12</b>                                           |
| <sup>1</sup> 2.5 times the average daily flow<br><sup>2</sup> Includes Woodcreek North, which is 233 acres designated Urban Reserve, and the Diamond Creek, Eskaton and Mourier properties, which combined are 503 acres.<br><sup>3</sup> City projections of wastewater generation assume buildout of the Light Industrial designations on the Diamond Creek, Eskaton and Mourier 140 properties. |                              |                                                   |                                                      |                                                        |
| SOURCE: City of Roseville, 1996; EIP Associates, 1996.                                                                                                                                                                                                                                                                                                                                             |                              |                                                   |                                                      |                                                        |

in dispatch and records, would also be needed to support the activities of the additional officers. New communication equipment could also be required.

The RPD has also indicated that development could require other changes to the police service operation in the City of Roseville. The bike trails proposed in the NRSP would be designed with open views to minimize attractive environments for criminal activity to occur. Lastly, radio coverage in the Plan Area could require repeaters and enhancement of the existing communication system to ensure that adequate communication is available to the RPD.<sup>35</sup>

The design of the bike trails in combination with the mitigation measure to increase the number of police officers would reduce impacts to a less-than-significant level.

## **Fire Response**

|                               |                                                       |
|-------------------------------|-------------------------------------------------------|
| <b>IMPACT 4.12-12(A):</b>     | <b>Failure to meet RFD response standards.</b>        |
| <b>SIGNIFICANCE:</b>          | Significant                                           |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.12-3 (Dedicate new fire station) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                 |

According to the RFD, the increased resident population within the fire district resulting from the development of Phase I would cause a substantial increase in demand for fire protection services.

The RFD has indicated that Phase I would be served by Station 2, which is located approximately 2.8 miles from the intersection of Blue Oaks Boulevard and Foothills Boulevard, and a future station to be located either at the northeast corner of Del Webb, or a site designated within Phase I or east of Phase I (see Figure 4.12-2). The new station would be funded by the Proposed Project through the construction tax. Regardless of its location, the new station must be sited to ensure that all of Phase I would be within the Department's response time standard, and that overlap between station service areas is minimized. If the Del Webb site is not used, then a provision will be needed to serve the Del Webb Specific Plan Area. A temporary facility may be needed on Pleasant Grove Boulevard, or the designated site in Neighborhood D may need to be constructed in Phase I rather than Phase II. However, the RFD is reviewing whether additional fire stations would be required to serve the development in and adjacent to the Plan Area. The RFD has also indicated that the northern portion of the Plan Area would meet the identified standards, including responding within four minutes 80 percent of the time. This assumes 100 percent staff availability and the assistance of Station 2.

The RFD has expressed a concern that northern portions of the Diamond Creek property may not receive adequate levels of service.<sup>36</sup> The RFD will need to ensure adequate emergency access to all portions of Phase I, which may include relocation of the existing permanent fire station site on Blue Oaks Boulevard to a better situated site.



**Solid Waste****IMPACT 4.12-13(A):****Increased solid waste generation.****SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None required

If the current per capita generation rate of 1.26 tons per year of solid waste remains the same, then a total of 7,550 tons per year of solid waste would be generated by the development of Phase I. As the mandated recycling goals are met, it is assumed that only a maximum of 5,663 tons per year would be deposited at the landfill up to Year 1999. From Year 2000 on, the total solid waste sent to the landfill is anticipated to drop to 3,775 tons per year (see Table 4.12-13).

**TABLE 4.12-13  
PHASE I  
NORTH ROSEVILLE SPECIFIC PLAN SOLID WASTE GENERATION**

| Total Number of Residential Units | Average Number of Persons Per Household | Increased Residential Population | Annual Per Capita Solid Waste (tons/year) | Total Solid Waste Generation (tons/year) | Diversion Rate |     | Total Solid Waste Disposed at Landfill (tons/year) |
|-----------------------------------|-----------------------------------------|----------------------------------|-------------------------------------------|------------------------------------------|----------------|-----|----------------------------------------------------|
|                                   |                                         |                                  |                                           |                                          |                |     |                                                    |
| 2,123                             | 2.5                                     | 5,392                            | 1.26                                      | 6,794                                    | 1995           | 25% | 5,096                                              |
|                                   |                                         |                                  |                                           |                                          | 2000           | 50% | 3,397                                              |
| 400                               | 1.5                                     | 600                              | 1.26                                      | 756                                      | 1995           | 25% | 567                                                |
|                                   |                                         |                                  |                                           |                                          | 2000           | 50% | 378                                                |

SOURCE: City of Roseville, 1996; EIP Associates, 1996.

The additional 7,550 tons per year of solid waste generated by development of Phase I prior to 1999 would be hauled to the WRS� and would require additional City of Roseville solid waste hauling services. As part of standard City practice, the project applicant would be required to pay for the purchase of one 90-gallon solid waste receptacle per household. This receptacle would be required to be compatible with current City waste loading equipment.

The remaining capacity of the WRS� is approximately 6,370,000 tons with a life expectancy of 25 years. The WRS� has a planned expansion that will extend the life of the landfill to 35 years. With the implementation of the source reduction and recycling measures, the additional solid waste generated within the project area is not anticipated to substantially reduce the lifespan of the landfill. Therefore, the impact is considered less than significant.

**Electrical Service****IMPACT 4.12-14(A):****Increased demand for electrical supply.****SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None required

The development and implementation of Phase I would add land uses that would increase the demand for electrical services. As shown in Table 4.12-14, the increased demand for electrical service is estimated to average 11.79 MW per year within Phase I, an increase of 6.5 percent over existing levels. As shown in Figure 4.12-3, 60 kV lines are planned along Blue Oaks Boulevard, which, along with a substation in the Diamond Creek property, will provide adequate electrical infrastructure to serve Phase I. Therefore, the demand for electricity is considered a less-than-significant impact. It is important to note that impacts related to changing power generation and distribution in the western U.S. over time as a result of the Proposed Project cannot be ascertained.

**TABLE 4.12-14  
PHASE I  
NORTH ROSEVILLE SPECIFIC PLAN  
ANNUAL ELECTRICAL DEMAND**

| <b>Land Use Category</b>                               | <b>Number of Units/Acres</b> | <b>Electrical Demand Factor</b> | <b>Estimated Electrical Demand (MW)</b> |
|--------------------------------------------------------|------------------------------|---------------------------------|-----------------------------------------|
| Residential                                            | 2,523 units                  | 0.0038 MW per dwelling unit     | 9.6                                     |
| Commercial                                             | 37.7 acres                   | 0.0450 MW per acre              | 1.7                                     |
| Office-Business Professional                           | 4.4 acres                    | 0.0400 MW per acre              | .18                                     |
| Schools                                                | 38.30 acres                  | 0.0080 kW per acre              | 0.31                                    |
| <b>TOTAL PHASE I ELECTRICAL DEMAND</b>                 |                              |                                 | <b>11.79</b>                            |
| SOURCE: City of Roseville, 1996; EIP Associates, 1996. |                              |                                 |                                         |

It should also be noted that the sources of energy are diverse and widespread. The exact source that would supply the Plan Area is not known, and it is beyond the purview of this EIR to speculate about the impacts of using any particular source of energy (e.g., hydroelectric, coal).

## Natural Gas

|                            |                                          |
|----------------------------|------------------------------------------|
| <b>IMPACT 4.12-15(A):</b>  | <b>Increased demand for natural gas.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                    |
| <b>MITIGATION MEASURE:</b> | None required                            |

The development and implementation of Phase I would increase the demand for natural gas. As shown in Table 4.12-15, the increased demand for natural gas is estimated to average approximately 6,310,680 million Therms per year.

PG&E has indicated that there are about 30 million cfd of natural gas that are allocated to the City of Roseville but are not used. With one Therm equal to about 100 cubic feet of gas, this represents 300,000 Therms per day or 109.5 million Therms per year.<sup>37</sup> The increased demand of approximately 16.6 million Therms per year under Phase I would be met by this excess natural gas supply. According to PG&E, there is adequate supply; therefore, this impact is considered less than significant.

| TABLE 4.12-15                                                         |                          |                                   |                                             |
|-----------------------------------------------------------------------|--------------------------|-----------------------------------|---------------------------------------------|
| PHASE I<br>NORTH ROSEVILLE SPECIFIC PLAN<br>ANNUAL NATURAL GAS DEMAND |                          |                                   |                                             |
| Land Use Category                                                     | Number of<br>Units/Acres | Natural Gas<br>Demand Factor      | Estimated<br>Natural Gas Demand<br>(Therms) |
| Residential                                                           | 2,523 units              | 1,440 Therms per dwelling<br>unit | 3,633,120                                   |
| Commercial/<br>Business-Professional                                  | 42.1 acres               | 63,600 Therms per acre            | 2,677,560                                   |
| <b>TOTAL PHASE I NATURAL GAS DEMAND</b>                               |                          |                                   | <b>6,310,680</b>                            |
| SOURCE: City of Roseville, 1996; EIP Associates, 1996.                |                          |                                   |                                             |

It should be noted that the sources of energy are diverse and widespread. The exact source that would supply the Plan Area is not known, and it is beyond the purview of this EIR to speculate about the impacts of using any particular source of energy (e.g., hydroelectric, coal).

## Schools

|                            |                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------|
| <b>IMPACT 4.12-16(A):</b>  | <b>Increased demand for school services in the Roseville Joint Union High School District.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                                          |
| <b>MITIGATION MEASURE:</b> | None required                                                                                  |



Development of Phase I would result in additional high school students in the Roseville Joint Union High School District (RJUHS). As shown in Table 4.12-16, an additional 448 high school students would be generated in Phase I. Assuming the standard capacity of a new high school is approximately 1,800 students, the development of the Phase I would require the capacity of approximately one quarter of a high school to adequately meet additional student demand. The RJUHS has identified the need for a continuation high school; such a school may be included in the Plan Area or elsewhere in the city. The newly opened Woodcreek High School has a remaining capacity of 35 students.<sup>38</sup> However, other development could use the remaining capacity at Woodcreek High School by the time the Plan Area is built out.

**TABLE 4.12-16**

**PHASE I  
NORTH ROSEVILLE SPECIFIC PLAN STUDENT GENERATION IN THE  
ROSEVILLE JOINT UNION HIGH SCHOOL DISTRICT**

| <b>Residential Type</b>                                                                                       | <b>Number of Units</b> | <b>Students Per Unit (grades 9-12)</b> | <b>Number of Students</b> |
|---------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------|---------------------------|
| Single family                                                                                                 | 1,848                  | 0.2362                                 | 436                       |
| Multi-family                                                                                                  | 275                    | 0.0445                                 | 12                        |
| <b>TOTAL STUDENTS FOR PHASE I (Grades 9-12)</b>                                                               |                        |                                        | <b>448</b>                |
| SOURCE: Roseville Joint Union High School District; North Roseville Specific Plan 1997; EIP Associates, 1996. |                        |                                        |                           |

The Roseville General Plan contains the following policies to address school facilities:

- FC-2. Adequate facilities must be shown to be available in a timely manner before approval will be granted to new residential development.
- FC-3. Financing for new school facilities will be identified and secured before new development is approved.

The Proposed Project would require landowners to pay the school impact fees as required by the school districts. The Applicants have met with the high school district and have agreed to mitigate 100 percent of the Proposed Project's impact.<sup>39</sup> With implementation of the General Plan policies and the school impact fees, the impact is considered less than significant.

**IMPACT 4.12-17(A):**

SIGNIFICANCE:

MITIGATION MEASURE:

**Increased demand for elementary school services.**

Less than significant

None required

Development of Phase I would result in increased demand for school services in the Roseville City School District. As shown in Table 4.12-17, an additional 775 elementary school

(kindergarten through sixth grades) students and 423 intermediate (seventh through eighth grades) students would be generated in Phase I, which is served by the Roseville City School District. Assuming that new elementary schools are typically built for a capacity of 600 students and intermediate schools are built for a capacity of 900 students, Phase I would require one elementary school and approximately one-third of an intermediate school. The District is currently operating under capacity, but the anticipated student increase from implementation of the NRSP would exceed the district's total student capacity.

**TABLE 4.12-17  
PHASE I  
NORTH ROSEVILLE SPECIFIC PLAN  
STUDENT GENERATION IN THE ROSEVILLE CITY SCHOOL DISTRICT**

| Residential Type                                                                             | Number of Units | Students Per Unit |        | Number of Students (K-6) | Number of Students (7-8) |
|----------------------------------------------------------------------------------------------|-----------------|-------------------|--------|--------------------------|--------------------------|
| Single Family (Detached)                                                                     | 1,848           | Grades K-6        | 0.3993 | 738                      | ----                     |
|                                                                                              |                 | Grades 7-8        | 0.1993 | ----                     | 368                      |
| Multi-family (Attached)                                                                      | 275             | Grades K-6        | 0.1339 | 37                       | ----                     |
|                                                                                              |                 | Grades 7-8        | 0.1993 | ----                     | 55                       |
| Total Students (K-6)                                                                         |                 |                   |        | 775                      | ----                     |
| Total Students (7-8)                                                                         |                 |                   |        | ----                     | 423                      |
| TOTAL STUDENTS FOR PHASE I (Grades K-8)                                                      |                 |                   |        | 1,198                    |                          |
| SOURCE: Roseville City School District; North Roseville Specific Plan; EIP Associates, 1996. |                 |                   |        |                          |                          |

Phase I of the NRSP dedicates 38.3 acres to provide three school sites to be operated by the Roseville City School district. An eight-acre elementary school site is located in the Diamond Creek property, a 22.3-acre intermediate school site is located in the Mourier 140 property along with an 8-acre elementary school site located in the Woodcreek North property. The construction and operation of these new school sites are expected to accommodate the anticipated kindergarten through eighth grade students generated within the Roseville City School District.

As discussed above under Impact 4.12-16(A), City of Roseville General Plan policies FC-2 and FC-3, require adequate school facilities to be available and the financing for new schools be identified and secured before new residential development is approved. In addition, the Proposed Project requires landowners in the Plan Area to pay school impact fees required by the school districts. The provision of school sites, along with implementation of the General Plan policies, would reduce impacts on the Roseville City School District to a less-than-significant level.



## Libraries

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| <b>IMPACT 4.12-18(A):</b>     | <b>Increased demand for library services.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                   |
| <b>MITIGATION MEASURE:</b>    | 4.12-4 (Contribute to library funding)        |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                         |

The anticipated 5,992 new residents in Phase I of the NRSP area are expected to increase the demand for library services. The branch library closest to Phase I would be the proposed library at Mahany Park. However, this library is intended to serve the demand of the residents of the approved Northwest Roseville Specific Plan. The additional demand for library services created by residents in Phase I of the NRSP could contribute to overcrowding of this new library.

Consistent with the City of Roseville's guidelines of one branch library of 10,300 square feet for every 15,000 to 20,000 residents, each resident should be provided with between approximately one-half and two-thirds of a square foot of library floor area. By applying this range to the proposed Specific Plan, the relatively small number of new residents generated in Phase I would not constitute the need for a new library. It should be noted, due to the close proximity of the Del Webb development project, the combined population base between Del Webb and the Proposed Project would warrant the construction of a new library, or the provision of equivalent library services through expansion of existing facilities.

If the City establishes a city-wide financing mechanism to finance future library facilities, the landowners would participate in contributing their fair-share to the fund. This would reduce any impacts to libraries below a level of significance. Because the City may elect not to establish the fund, the impact could remain significant. To ensure that the impact on library services is mitigated, implementation of the General Plan policies are required. The City General Plan policies include securing the development of additional library space regardless of the establishment of a city-wide library fund. Payment of fees for expanded library facilities from the Plan Area in conjunction with the Del Webb Specific Plan Area, could be used to construct a new library. This would reduce any impacts on libraries to a less-than-significant level.

## Parks and Recreation

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>IMPACT 4.12-19(A):</b>  | <b>Increased demand for park facilities.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                        |
| <b>MITIGATION MEASURE:</b> | None required                                |

Phase I would add 5,992 new residents to the City of Roseville. These new residents would increase the demand for total park land in the City of Roseville by approximately 54 acres, based on the City's General Plan's park acreage standard of nine acres per 1,000 residents.

Phase I designates a total of 79.2 acres in four parks and 81.5 acres dedicated for undeveloped open space (see Figure 3-5, Parks and Recreation Master Plan), which is intended to preserve floodplain and wetland areas. The NRSP indicates that the parks and recreation areas are key



elements that shape the Plan Area. These elements would be intended to provide visual orientation and definition of subareas within the Plan Area, as well as public commons for recreation and social interaction. All parks and open spaces in the Plan Area would be accessible to the public.

The four parks in Phase I contain a total of approximately 79.2 acres, or 25.2 more acres than required to meet the City's standard of nine acres per thousand residents. According to the NRSP, these parks would have a variety of "active" facilities, including ball fields, tot lots, picnic areas, and multi-use grassy areas. With development of these parks, all residents of the Plan Area would be within one mile of a neighborhood/community park, which is consistent with the Parks Master Plan Standards.

Each acre set aside for active park use is credited as a full acre. Partial credit ranging from 1:5 to 1:10 (one credit acre for five to ten acres dedicated) may be granted for non-traditional recreational facilities that enable the preservation of the unique environmental opportunities. The total park area credited to Phase I is approximately 87.2 acres. The parkland area credited is tabulated in Table 4.12-18. The City requires all new residential developments to dedicate land and pay in-lieu fees (or other mechanism) to ensure development of new parks. With the development of the designated parkland, the impact is considered less than significant.

### **Cable Television and Telephone Services**

|                            |                                                                      |
|----------------------------|----------------------------------------------------------------------|
| <b>IMPACT 4.12-20(A):</b>  | <b>Increased demand for cable television and telephone services.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                |
| <b>MITIGATION MEASURE:</b> | None required                                                        |

The development of Phase I would create an increased demand for cable television and telephone services. Assuming that each new dwelling unit would require one cable television and one telephone connection, Phase I would require at a minimum 2,523 new residential connections. The cable television needs of Phase I would be served by Jones Intercable and Roseville Telephone Company or other AT&T Service providers would service the area's phone needs. Similarly, assuming that each acre of all non-residential land, excluding parks and open space, would require one cable television and telephone connection, the Plan Area would require another 81 non-residential connections for a total of approximately 1,830 connections.

As stated above, these additional services would be provided by private utility companies and would be funded through developer fees and future customer billing. In addition, the utility companies would be given the opportunity to review and comment on any proposed development requiring new service. Both service providers have stated that they will be able to provide service. Due to the demand-responsive nature of cable television and telephone services, impacts to these public services are considered less than significant.

TABLE 4.12-18

**PHASE I  
DESIGNATED PARK AND OPEN SPACE**

| <b>Parks</b>              | <b>Parcel #</b> | <b>Actual Acreage</b> | <b>Allowance</b> | <b>Park Credit</b> |
|---------------------------|-----------------|-----------------------|------------------|--------------------|
| North School Park         | DC-50           | 4.1                   | 1:1              | 4.1                |
| Diamond Creek Park        | DC-51-54        | 30.5                  | 1:1              | 30.5               |
| Commons Park              | M-50            | 2.7                   | 1:1              | 2.7                |
| Pleasant Grove Creek Park | WN-50           | 26.0                  | 1:1              | 26.0               |
| Pleasant Grove Creek Park | WN-51           | 15.9                  | 1:1              | 15.9               |
| <b>TOTAL:</b>             |                 | <b>79.2</b>           |                  | <b>79.2</b>        |
| Open Space                | DC-80           | 6.8                   | 1:10             | .68                |
| Open Space                | DC-81           | 13.5                  | 1:5              | 1.35               |
| Open Space                | DC-82           | 1.3                   | 1:10             | .13                |
| Open Space                | M-80            | 10.5                  | 1:10             | 1.05               |
| Open Space                | M-81            | 2.9                   | 1:10             | .29                |
| Open Space                | WN-80           | 6.8                   | 1:10             | .68                |
| Open Space                | WN-81           | 10.8                  | 1:10             | 1.08               |
| Open Space                | WN-82           | 9.2                   | 1:10             | .92                |
| Open Space                | WN-83           | 1.5                   | 1:10             | .15                |
| Open Space                | WN-84           | 1.1                   | 1:10             | .11                |
| Open Space                | WN-85           | 15.2                  | 1:10             | 1.52               |
| <b>TOTAL:</b>             |                 | <b>158.8</b>          |                  | <b>87.2</b>        |

SOURCE: North Roseville Specific Plan, 1997.

**FULL PROJECT IMPACTS****Water, Reclaimed Water and Wastewater**

|                            |                                             |
|----------------------------|---------------------------------------------|
| <b>IMPACT 4.12-1(B):</b>   | <b>Increased demand for domestic water.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                       |
| <b>MITIGATION MEASURE:</b> | None required                               |

Table 4.12-19 presents water demand for Phase II and the Full Project. Total average demand for water from Phase II development would be 1.73 mgd. If all parks are irrigated with reclaimed water, the adjusted average demand would be 1.62 mgd. When added to the net average demand for Phase I (shown in Table 4.12-10), the Full Project average demand for water would be 2.13 mgd.

As discussed under Impact 4.12-1(A), projected average demand for water at buildout would be 40.0 mgd without the Proposed Project. The Full Project would increase average water to 42.13 mgd. The City has existing entitlements for 55.3 mgd. Because project water demand including the Proposed Project would be less than existing entitlements, this is considered a less-than-significant impact.

|                            |                                                        |
|----------------------------|--------------------------------------------------------|
| <b>Impact 4.12-2(B):</b>   | <b>Increased demand for domestic water conveyance.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                  |
| <b>MITIGATION MEASURE:</b> | None required                                          |

As discussed under Impact 4.12-2(A), the City's current contract with the USBR allows for only 42 mgd to be conveyed to the city because the conveyance system has certain limitations. By buildout, maximum water demand is projected to be 80.00 mgd without the Proposed Project, which would exceed existing conveyance facilities. The Full Project would add 4.26 mgd, for a total maximum demand of 84.26 mgd at buildout.

Additional conveyance facilities are set to be operational by the year 2000. This would increase the amount of water conveyed to the city from 42 mgd to 96 mgd, which would allow the City to supply water to the Full Project. Therefore, impacts on the conveyance system associated with providing water to the Full Project would be considered less than significant.

|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| <b>IMPACT 4.12-3(B):</b>   | <b>Decreased water supply during drought periods.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                 |
| <b>MITIGATION MEASURE:</b> | None required                                         |

As discussed above under Impact 4.12-3(A), a variety of measures are in place that would reduce the impact of the Full Project on the City's water supply during drought conditions to less-than-significant levels.



TABLE 4.12-19

## FULL PROJECT WATER DEMAND

| Parcel                                                    | Zoning    | Land Use                   | Density | Net Acreage | Units | Water Demand Factor | Total Demand     | Reclaimed Usage | Adjusted Demand <sup>1</sup> |
|-----------------------------------------------------------|-----------|----------------------------|---------|-------------|-------|---------------------|------------------|-----------------|------------------------------|
| <b>PHASE II WATER DEMAND</b>                              |           |                            |         |             |       |                     |                  |                 |                              |
| <b>Walaire 160 (Neighborhood C)</b>                       |           |                            |         |             |       |                     |                  |                 |                              |
| W-1                                                       | UR(R1/DS) | UR (LDR)                   | 5.0     | 33.5        | 168   | 760                 | 127,680          |                 |                              |
| W-2                                                       | UR(R1/DS) | UR (LDR)                   | 3.1     | 3.2         | 10    | 922                 | 9,220            |                 |                              |
| W-3                                                       | UR(R1/DS) | UR (LDR)                   | 4.7     | 15.6        | 73    | 760                 | 55,480           |                 |                              |
| W-4                                                       | UR(R1/DS) | UR (MDR)                   | 7.2     | 14.4        | 104   | 566                 | 58,864           |                 |                              |
| W-5                                                       | UR(R1/DS) | UR (LDR)                   | 5.0     | 13.7        | 68    | 685                 | 46,580           |                 |                              |
| W-6                                                       | UR(R1/DS) | UR (LDR)                   | 5.4     | 9.9         | 53    | 685                 | 36,305           |                 |                              |
| W-7                                                       | UR(R1/DS) | UR (MDR)                   | 10.0    | 5.0         | 50    | 425                 | 21,250           |                 |                              |
| W-8                                                       | UR(R1/DS) | UR (LDR)                   | 4.9     | 7.2         | 35    | 760                 | 26,600           |                 |                              |
| W-50                                                      | UR(PR)    | UR (Park)                  |         | 13.0        |       | 3,881               | 50,453           | 50,453          |                              |
| W-51                                                      | UR(PR)    | UR (Park)                  |         | 0.4         |       | 3,881               | 1,552            | 1,552           |                              |
| W-52                                                      | UR(PR)    | UR (Park)                  |         | 0.3         |       | 3,881               | 1,164            | 1,164           |                              |
| W-53                                                      | UR(PR)    | UR (Park)                  |         | 3.9         |       | 3,881               | 15,136           | 15,136          |                              |
| Neighborhood C Subtotal                                   |           |                            |         | 161.0       | 561   |                     | 450,284          | 68,305          | 381,979                      |
| <b>Woodcreek West (Neighborhood D)</b>                    |           |                            |         |             |       |                     |                  |                 |                              |
| WW-1                                                      | UR(R1)    | UR (LDR)                   | 4.0     | 26.2        | 104   | 760                 | 79,040           |                 |                              |
| WW-2                                                      | UR(R1)    | UR (LDR)                   | 4.4     | 30.6        | 135   | 760                 | 102,600          |                 |                              |
| WW-3                                                      | UR(R1)    | UR (LDR)                   | 4.0     | 23.6        | 95    | 760                 | 72,200           |                 |                              |
| WW-4                                                      | UR(R1)    | UR (LDR)                   | 3.2     | 34.9        | 113   | 922                 | 104,186          |                 |                              |
| WW-5                                                      | UR(R1/DS) | UR (LDR)                   | 3.7     | 43.7        | 162   | 760                 | 123,120          |                 |                              |
| WW-6                                                      | UR(R1/DS) | UR (LDR)                   | 5.6     | 31.1        | 173   | 685                 | 118,505          |                 |                              |
| WW-7                                                      | UR(R1/DS) | UR (LDR)                   | 5.5     | 23.4        | 129   | 685                 | 88,365           |                 |                              |
| WW-8                                                      | UR(R1/DS) | UR (LDR)                   | 5.6     | 19.2        | 107   | 685                 | 73,295           |                 |                              |
| WW-9                                                      | UR(R1/DS) | UR (LDR)                   | 4.3     | 23.6        | 102   | 760                 | 77,520           |                 |                              |
| WW-10                                                     | UR(R1/DS) | UR (LDR)                   | 5.4     | 21.8        | 117   | 685                 | 80,145           |                 |                              |
| WW-11                                                     | UR(RS)    | UR (LDR)                   | 6.1     | 31.2        | 191   | 566                 | 108,106          |                 |                              |
| WW-12                                                     | UR(R1/DS) | UR (MDR)                   | 8.3     | 16.9        | 140   | 425                 | 59,500           |                 |                              |
| WW-13                                                     | UR(R3)    | UR (HDR)                   | 19.3    | 11.5        | 222   | 190                 | 42,180           |                 |                              |
| WW-14                                                     | UR(R3)    | UR (HDR)                   | 20.3    | 11.0        | 224   | 190                 | 42,560           |                 |                              |
| WW-40                                                     | UR(CC)    | UR (Commercial)            |         | 6.9         |       | 2,678               | 18,478           |                 |                              |
| WW-50                                                     | UR(PR)    | UR (Park)                  |         | 12.0        |       | 3,881               | 46,572           | 46,572          |                              |
| WW-70                                                     | UR(P/QP)  | UR (Elementary School)     |         | 10.0        |       | 3,881               | 38,810           |                 |                              |
| WW-71                                                     | UR(P/QP)  | UR (School Administration) |         | 3.9         |       | 2,678               | 10,444           |                 |                              |
| WW-72                                                     | UR(P/QP)  | UR (Fire Station)          |         | 1.5         |       | 2,000               | 3,000            |                 |                              |
| Neighborhood D Subtotal                                   |           |                            |         |             |       |                     | 1,288,626        | 46,572          | 1,242,054                    |
| <b>Phase II Demand</b>                                    |           |                            |         |             |       |                     | <b>1,738,910</b> | <b>114,877</b>  | <b>1,624,033</b>             |
| <b>Phase I Net Demand<sup>2</sup></b>                     |           |                            |         |             |       |                     |                  |                 | <b>501,305</b>               |
| <b>FULL PROJECT DEMAND</b>                                |           |                            |         |             |       |                     |                  |                 | <b>2,125,338</b>             |
| <sup>1</sup> Reclaimed water subtracted from total demand |           |                            |         |             |       |                     |                  |                 |                              |
| <sup>2</sup> See Table 4.12-10                            |           |                            |         |             |       |                     |                  |                 |                              |
| SOURCE: City of Roseville, 1997.                          |           |                            |         |             |       |                     |                  |                 |                              |

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>IMPACT 4.12-4(B):</b>      | <b>Increased demand for domestic water treatment.</b>                  |
| <b>SIGNIFICANCE:</b>          | Significant                                                            |
| <b>MITIGATION MEASURE:</b>    | 4.12-1 (Restrict development until water treatment capacity increases) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                  |

At the time the Full Project reaches full buildout, the maximum daily demand in the City of Roseville is estimated to be 80.0 mgd. The Full Project would contribute 4.26 mgd which would increase the city water demand to 84.26 mgd.

As discussed under Impact 4.12-4(A), the City's Water Treatment Plan can supply 48 mgd of treated water. The City is planning to expand the existing plant to 60 mgd by the Year 2001, and to 72 mgd by 2010 or 2011. Subsequent expansions will be developed as needed.

The alternatives for expanding the City's water treatment capacity depend on the City water supply selected. If the Folsom Lake or Below Folsom Lake Supply Alternative is selected, then the additional treatment capacity required would need to be provided by expanding the existing Roseville Water Treatment Plant (WTP). The WTP could be expanded in 6 mgd increments up to a maximum of 96 mgd, which would be enough to meet the Proposed Project's maximum peak day water demand. This would depend on the potential for land acquisition and the placement of additional storage reservoir(s) at the WTP site. Raw water conveyance facilities from Folsom Lake would also need to be expanded in order to provide an adequate water supply to the WTP. These facilities are currently under design.

If the PCWA Supply Alternative is selected, then additional treatment capacity could be provided by PCWA facilities. In order to provide PCWA water to the City, either the existing WTP would need to be expanded or a new West Placer Water Treatment Plant could be constructed. Expanding the Foothill WTP would require the installation of a major water pipeline to the plant and significant expansion over the plant's existing capacity. Because of site constraints, it is unlikely that both Roseville's and PCWA's future water supply needs could be met by expanding the Foothill WTP. Therefore, a new West Placer WTP may be required either in addition to expanding the Foothill WTP or in place of it. The new WTP is part of PCWA's Capital Improvement Plan.

By restricting development until water treatment capacity is available, this impact is considered less than significant.

|                            |                                                       |
|----------------------------|-------------------------------------------------------|
| <b>IMPACT 4.12-5(B):</b>   | <b>Increased demand on water distribution system.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                 |
| <b>MITIGATION MEASURE:</b> | None required                                         |

As discussed under Impact 4.12-5(A), the ultimate size and exact location of the water mains and pipes required to serve the Plan Area would be finalized during the final design phase of the

NRSP. The location of the Plan Area makes it feasible to connect directly into the City's existing water system infrastructure.

Based on a conceptual water distribution system, Neighborhood D (Woodcreek West) would connect into the existing 24-inch line in Pleasant Grove Boulevard and Baseline Road, and the 12-inch main in Junction Boulevard. These connections would form a complete loop by connecting to a new 12-inch water main that would be placed in Fiddymment Road.

The northwest portion of the Plan Area (Neighborhood C -- Walaire 160) under the Full Project would also connect into the 24-inch water main in Blue Oaks Boulevard to be constructed in late Spring or early Summer 1997, as part of the Del Webb Specific Plan. A loop consisting of a 12-inch and a 16-inch main would extend from Neighborhood A (Diamond Creek) to connect to the 24-inch line in Blue Oaks Boulevard.

The City of Roseville has also identified several improvements to its water transmission and distribution system that would be required to deliver water to the future development in the city. This includes two pressure reducing stations within Neighborhood D (Woodcreek West). With completion of these improvements and the placement of the water mains on the Plan Area, identified in Phase I of the NRSP, the Proposed Project would have a less-than-significant impact on the existing water distribution system.

|                          |                                          |
|--------------------------|------------------------------------------|
| <b>IMPACT 4.12-6(B):</b> | <b>Residual discharges to Dry Creek.</b> |
| SIGNIFICANCE:            | Less than significant                    |
| MITIGATION MEASURE:      | None required                            |

See discussion under Impact 4.12-6(A).

|                          |                                         |
|--------------------------|-----------------------------------------|
| <b>IMPACT 4.12-7(B):</b> | <b>Reduced demand on potable water.</b> |
| SIGNIFICANCE:            | Less than significant                   |
| MITIGATION MEASURE:      | None required                           |

See discussion under Impact 4.12-7(A).

|                          |                                          |
|--------------------------|------------------------------------------|
| <b>IMPACT 4.12-8(B):</b> | <b>Increased use of reclaimed water.</b> |
| SIGNIFICANCE:            | Less than significant                    |
| MITIGATION MEASURE:      | None required                            |

As discussed under Impact 4.12-8(A), the Proposed Project includes reclaimed water lines which will connect directly to existing city reclaimed water lines outside of the Plan Area. For Phase II, the existing reclaimed water lines along Baseline Road and Pleasant Grove Boulevard would be extended west to Fiddymment Road and tie into an 18 (or 12) - inch reclaimed water line in Neighborhood D (Woodcreek West).



The use of reclaimed water to irrigate parks and other public areas will reduce the Full Project's consumption of potable water and will reduce the amount of treated wastewater discharged into Dry Creek. Therefore, the Full Project's impact on the existing water distribution system would be less than significant.

|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| <b>IMPACT 4.12-9(B):</b>   | <b>Increased demand on wastewater collection system.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                    |
| <b>MITIGATION MEASURE:</b> | None required                                            |

As shown in Table 4.12-20, Phase II would contribute 1.11 mgd to the wastewater conveyance system and 2.56 mgd during peak wastewater flows. As discussed under Impact 4.12-9(A), Phase I net wastewater generation would be a negative number (-.05 mgd average and -0.12 mgd maximum) because the City assumed light industrial development on the Diamond Creek, Eskaton and Mourier 140 properties when projecting future wastewater generation. When both phases are combined, the Full Project would generate an average of 1.06 mgd and a maximum of 2.44 mgd. The increased flows would require collection system improvements, including new or modified collection mains and pumping stations. Implementation of General Plan policies and the Specific Plan Policy 6.15.2 would reduce impacts on the wastewater collection system to a less-than-significant level.

|                            |                                                         |
|----------------------------|---------------------------------------------------------|
| <b>IMPACT 4.12-10(B):</b>  | <b>Increased demand on wastewater treatment system.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                   |
| <b>MITIGATION MEASURE:</b> | None required                                           |

Phase II would generate .69 mgd (average) and 1.73 (maximum) wastewater requiring treatment. When added to Phase I, Full Project generation would be .69 mgd average daily flow (see Table 4.12-21). The maximum Full Project wet-weather flow is expected to be approximately 1.74 mgd. This amount could be accommodated by the existing treatment plant. In addition, as discussed below, the City is participating in planning for further expansion of its regional wastewater treatment facilities. The City of Roseville is a participant in the Regional Wastewater Treatment Master Plan. The regional plan evaluates several options for meeting the wastewater treatment demand of the city as well as other incorporated and unincorporated areas through 2010. Options under consideration include expanding the existing Dry Creek treatment plant to meet 2010 demand, construction of a second plant in the Pleasant Grove Creek sewershed, and various combinations of plant capacities.

The wastewater treatment plant's capacity is 18 mgd (dry weather flow) and 45 mgd (wet weather flow). The plant is permitted to discharge these amounts to Dry Creek. The current average dry weather wastewater flow is approximately 13 mgd. During peak flows, the plant discharges nearly 30 mgd during wet weather.

**TABLE 4.12-20**

**FULL PROJECT  
NORTH ROSEVILLE SPECIFIC PLAN WASTEWATER GENERATION  
IN CONVEYANCE SYSTEM**

| <b>Proposed Land Use Category</b>                      | <b>Number of Units/Acres</b> | <b>Wastewater Generation Factor (average gpd)</b> | <b>Estimated Wastewater Generation (average mgd)</b> | <b>Maximum Daily Wastewater Flow (mgd)<sup>1</sup></b> |
|--------------------------------------------------------|------------------------------|---------------------------------------------------|------------------------------------------------------|--------------------------------------------------------|
| Residential                                            | 2,575 units                  | 400 gpd per dwelling unit                         | 1.03                                                 | 2.37                                                   |
| Commercial/<br>Business<br>Professional                | 6.9 acres                    | 1,600 gpd per acre                                | 0.01                                                 | 0.02                                                   |
| Schools                                                | 13.9 acres                   | 1,600 gpd per acre                                | 0.02                                                 | 0.05                                                   |
| Parks                                                  | 29.6 acres                   | 1,600 gpd per acre                                | 0.05                                                 | 0.12                                                   |
| <b>TOTAL PHASE II GENERATION</b>                       |                              |                                                   | <b>1.11</b>                                          | <b>2.56</b>                                            |
| <b>PHASE I NET GENERATION<sup>2</sup></b>              |                              |                                                   | <b>- 0.5</b>                                         | <b>- 0.12</b>                                          |
| <b>FULL PROJECT GENERATION</b>                         |                              |                                                   | <b>1.06 mgd</b>                                      | <b>2.44 mgd</b>                                        |
| <sup>1</sup> 2.3 times the average daily flow          |                              |                                                   |                                                      |                                                        |
| <sup>2</sup> See Table 4.12-11                         |                              |                                                   |                                                      |                                                        |
| SOURCE: City of Roseville, 1996; EIP Associates, 1996. |                              |                                                   |                                                      |                                                        |

TABLE 4.12-21

**FULL PROJECT  
NORTH ROSEVILLE SPECIFIC PLAN WASTEWATER GENERATION**

| <b>Proposed Land Use Category</b>                                                                                                             | <b>Number of Units/Acres</b> | <b>Wastewater Generation Factor (average gpd)</b> | <b>Estimated Wastewater Generation (average mgd)</b> | <b>Maximum Daily Wastewater Flow<sup>1</sup> (mgd)</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------|------------------------------------------------------|--------------------------------------------------------|
| Residential                                                                                                                                   | 2,575 units                  | 260 gpd per dwelling unit                         | 0.67                                                 | 1.68                                                   |
| Commercial/<br>Business Professional                                                                                                          | 6.9 acres                    | 1,040 gpd per acre                                | 0.01                                                 | 0.02                                                   |
| Schools                                                                                                                                       | 13.9 acres                   | 1,040 gpd per acre                                | 0.01                                                 | 0.03                                                   |
| <b>TOTAL FULL PROJECT GENERATION<sup>2</sup></b>                                                                                              |                              |                                                   | <b>0.69</b>                                          | <b>1.73</b>                                            |
| <b>PHASE I NET DEMAND</b>                                                                                                                     |                              |                                                   | <b>0.0</b>                                           | <b>0.01</b>                                            |
| <b>FULL PROJECT DEMAND</b>                                                                                                                    |                              |                                                   | <b>0.69 mgd</b>                                      | <b>1.74 mgd</b>                                        |
| <sup>1</sup> 2.5 times the average daily flow<br><sup>2</sup> See Table 4.12-12<br><br>SOURCE: City of Roseville, 1996; EIP Associates, 1996. |                              |                                                   |                                                      |                                                        |



The Roseville Regional Wastewater Treatment Service Area Master Plan, May 1996, outlines the future conveyance, treatment, and disposal of wastewater flows contributed by the cities of Roseville, Rocklin, Lincoln, Loomis, and unincorporated areas of Placer County. The Master Plan expands the current Roseville Regional Wastewater System service area from 70 square miles to a total of 95 square miles. The new facilities would meet the needs of the service area through the year 2015 based on the population projections under the 1992 City of Roseville General Plan. This assumes a Roseville population in excess of 270,000 persons by the year 2015.<sup>40</sup> Given existing capacity and anticipated expansion of wastewater treatment facilities, this is considered a less-than-significant impact.

The timing and nature of the improvements have not been determined, but the effect on the wastewater treatment capacity is limited by allowing the Roseville City Council and the regional jurisdictions to consider restricting development if adequate treatment capacity is not available. With this limitation, the impact of the project on wastewater treatment capacity is considered less than significant.

### **Police Services**

|                               |                                                                             |
|-------------------------------|-----------------------------------------------------------------------------|
| <b>IMPACT 4.12-11(B):</b>     | <b>Increased demand for police protection services.</b>                     |
| <b>SIGNIFICANCE:</b>          | Significant                                                                 |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.12-2 (Increase number of police officers in beat area) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                                       |

The Full Project would contribute a total of approximately 12,533 new residents, including 6,500 new residents from implementation of Phase II. The buildout of the Full Project would increase the demand for police services. As discussed under Impact 4.12-11(A), the additional population under Phase II would require approximately 7.8 new officers, for a Full Project total of approximately 14.8 full-time officers.

Revenues from property improvements, sales tax, and other sources as a result of the proposed project would increase the City's General fund. This would partially pay for the ongoing costs of additional law enforcement due to increased demand resulting from the Proposed Project.

The addition of new officers for the areas west of Woodcreek Oaks Boulevard would be sufficient to reduce the significance of the impact to a less-than-significant level.

### **Fire Response**

|                               |                                                       |
|-------------------------------|-------------------------------------------------------|
| <b>IMPACT 4.12-12(B):</b>     | <b>Failure to meet RFD response standards.</b>        |
| <b>SIGNIFICANCE:</b>          | Significant                                           |
| <b>MITIGATION MEASURE:</b>    | Mitigation Measure 4.12-3 (Dedicate new fire station) |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                                 |

The RFD has stated that Neighborhood D (Woodcreek West) would meet the adopted four minute response time only 36.5 percent of the time. When combined with the service to the remaining portion of the Plan Area, the four minute response time would be met only 76 percent of the time. A new fire station is planned for Neighborhood D (Woodcreek West) near the junction of Sun City Boulevard and Pleasant Grove Boulevard. This new station would provide first response to emergencies within this area and would be sufficient to meet the needs of the Full Project. Fire and emergency services in Phase I would not be contingent upon this new station, but the timing of the new fire station planned in Phase II would be consistent with the issuance of building permits. This would reduce any significant impacts to a less-than-significant level.

## Solid Waste

### IMPACT 4.12-13(B):

#### SIGNIFICANCE:

#### MITIGATION MEASURE:

**Increased solid waste generation.**

Less than significant

None required

The Full Project would contribute a total of 15,792 tons of solid waste per year (see Table 4.12-22). Based on the existing equipment, the City has determined that two additional 26-yard garbage trucks would be needed to accommodate the additional waste. The cost of these trucks would be paid through a fee per unit; the cost of two new City staff positions would be absorbed by the City through rate collection. This additional waste would be disposed of at the WRSL. The State mandated reduction in solid waste of 50 percent by the year 2000 would reduce the actual amount anticipated to be land filled. Therefore, the impact is less than significant. As previously mentioned, the current capacity of the landfill would accommodate solid waste through the Year 2017. Further, the landfill is anticipated to be expanded by an additional 480 acres which would add another 35 years to the life of the site.

**TABLE 4.12-22  
FULL PROJECT  
NORTH ROSEVILLE SPECIFIC PLAN SOLID WASTE GENERATION**

| Total Number of Residential Units | Average Number of Persons Per Household | Increased Residential Population | Annual Per Capita Solid Waste (tons/year) | Total Solid Waste Generation (tons/year) | Diversion Rate |     | Total Solid Waste Disposed at Landfill (tons/year) |
|-----------------------------------|-----------------------------------------|----------------------------------|-------------------------------------------|------------------------------------------|----------------|-----|----------------------------------------------------|
| 4,698                             | 2.54                                    | 11,933                           | 1.26                                      | 15,036                                   | 1995           | 25% | 11,277                                             |
|                                   |                                         |                                  |                                           |                                          | 2000           | 50% | 7,518                                              |
| 400                               | 1.5                                     | 600                              | 1.26                                      | 756                                      | 1995           | 25% | 567                                                |
|                                   |                                         |                                  |                                           |                                          | 2000           | 50% | 378                                                |
| TOTAL FULL PROJECT                |                                         |                                  |                                           | 15,792                                   | 1995           | 25% | 11,844                                             |
|                                   |                                         |                                  |                                           |                                          | 2000           | 50% | 7,896                                              |

SOURCE: City of Roseville, 1996; EIP Associates, 1996.

## Electrical Service

|                            |                                                |
|----------------------------|------------------------------------------------|
| <b>IMPACT 4.12-14(B):</b>  | <b>Increased demand for electrical supply.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                          |
| <b>MITIGATION MEASURE:</b> | None required                                  |

Implementation of the Full Project would add land uses that would increase the demand for electrical services. The increased demand for electrical service from Phase II is estimated to average 10.07 MW per year. Combined with Phase I the Full Project is estimated to increase electrical service to 21.9 MW per year (see Table 4.12-23).

**TABLE 4.12-23  
FULL PROJECT  
NORTH ROSEVILLE SPECIFIC PLAN  
ANNUAL ELECTRICAL DEMAND**

| <b>Land Use Category</b>                               | <b>Number of<br/>Units/Acres</b> | <b>Electrical<br/>Demand Factor</b> | <b>Estimated<br/>Electrical<br/>Demand (MW)</b> |
|--------------------------------------------------------|----------------------------------|-------------------------------------|-------------------------------------------------|
| Residential                                            | 5,098 units                      | 0.0038 MW per<br>dwelling unit      | 19.4                                            |
| Commercial/Business-<br>Professional                   | 49 acres                         | 0.0430 MW per acre                  | 2.1                                             |
| Schools                                                | 48.3 acres                       | 0.0080 kW per acre                  | 0.4                                             |
| <b>TOTAL FULL PROJECT DEMAND</b>                       |                                  |                                     | <b>21.9 MW</b>                                  |
| SOURCE: City of Roseville, 1996; EIP Associates, 1996. |                                  |                                     |                                                 |

The City would have sufficient capacity to meet this demand. The City of Roseville would be able to purchase additional electricity, and, as shown in Figure 4.12-3, electrical infrastructure is planned for the Plan Area. Therefore, the impact is considered less than significant.

## Natural Gas

|                            |                                          |
|----------------------------|------------------------------------------|
| <b>IMPACT 4.12-15(B):</b>  | <b>Increased demand for natural gas.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                    |
| <b>MITIGATION MEASURE:</b> | None required                            |



The development of Phase II would add land uses to the Plan Area that would increase the demand for natural gas. As shown in Table 4.12-24, the Full Project would require 10.5 million Therms per year.

PG&E has indicated that there are about 30 million cfd of natural gas that are allocated to the City of Roseville but are not used. With one therm equal to about 100 cubic feet of gas, this represents 300,000 therms per day or 109.5 million Therms per year.<sup>41</sup> The increase demand of approximately 10.5 million Therms per year would be met by this excess natural gas. Therefore, this impact is considered less than significant.

**TABLE 4.12-24  
FULL PROJECT  
NORTH ROSEVILLE SPECIFIC PLAN  
ANNUAL NATURAL GAS DEMAND**

| <b>Land Use Category</b>                               | <b>Number of Units/Acres</b> | <b>Natural Gas Demand Factor</b> | <b>Estimated Natural Gas Demand (Therms)</b> |
|--------------------------------------------------------|------------------------------|----------------------------------|----------------------------------------------|
| Residential                                            | <b>5,098 units</b>           | 1,440 Therms per dwelling unit   | <b>7,341,120</b>                             |
| Commercial-Business Professional                       | <b>49 acres</b>              | 63,600 Therms per acre           | <b>3,116,400</b>                             |
| <b>TOTAL FULL PROJECT DEMAND</b>                       |                              |                                  | <b>10,457,520</b>                            |
| SOURCE: City of Roseville, 1996; EIP Associates, 1996. |                              |                                  |                                              |

## Schools

### IMPACT 4.12-16(B):

**Increased demand for school services in the Roseville Joint Union High School District.**

### SIGNIFICANCE:

Less than significant

### MITIGATION MEASURE:

None required

The Full Project would contribute 971 new high school students in the Roseville Joint Union High School District (RJUHSD), as shown in Table 4.12-25. Assuming the standard capacity of a new high school is approximately 1,800 students, the Full Project would require the capacity of slightly more than half of a high school to adequately meet additional student demand.

The Proposed Project would require landowners to pay the school impact fees as required by the school districts. With implementation of the General Plan Policies (see discussion under Impact 4.12-16(A)) and school impact fees, the impact to school services in the RJUHSD is considered less than significant.

**TABLE 4.12-25****FULL PROJECT NORTH ROSEVILLE SPECIFIC PLAN STUDENT GENERATION IN THE ROSEVILLE JOINT UNION HIGH SCHOOL DISTRICT**

| <b>Residential Type</b>                                                                 | <b>Number of Units</b> | <b>Students Per Unit (grades 9-12)</b> | <b>Number of Students</b> |
|-----------------------------------------------------------------------------------------|------------------------|----------------------------------------|---------------------------|
| Single Family                                                                           | 3,977                  | 0.2362                                 | 939                       |
| Multi-Family                                                                            | 721                    | 0.0445                                 | 32                        |
| <b>FULL PROJECT</b>                                                                     | <b>4,698</b>           |                                        | <b>971</b>                |
| SOURCE: Roseville Joint Union High School District; North Roseville Specific Plan 1997. |                        |                                        |                           |

**IMPACT 4.12-17(B):****Increased demand for elementary school services.****SIGNIFICANCE:**

Less than significant

**MITIGATION MEASURE:**

None required

Development of Phase II would result in increased demand for school services in the Dry Creek Joint Elementary School District and the Roseville City School District. As shown in Tables 4.12-26 and 4.12-27, an additional 622 elementary school (kindergarten through fifth grades) students and 219 intermediate (sixth through eighth grades) students would be generated in the portion of the Plan Area that lies within the Dry Creek Joint Elementary School District. An additional 245 elementary school children (K-6) and 23 middle school children (7-8) would be generated in the Roseville City School District (see Impact 4.12-17(A) for a discussion of Phase I impacts on the Roseville City School District). A Full Project total of 1,466, including 1,020 K-6 and 446 7-8 students would be generated in the Roseville City School District. The district is currently operating at 115 percent over capacity, and the anticipated student increase from the Plan Area would exacerbate the District's capacity problem.

Neighborhood D (Woodcreek West) in Phase II dedicates Parcel WW-70, a 10 acre parcel for a new elementary school site. The construction and operation of this new school site is expected to accommodate the anticipated 622 kindergarten through fifth grade students generated in the Dry Creek School District area. A second elementary school site would be located in the Woodcreek North property and a third elementary school site would be located in the Diamond Creek property. These school sites are located outside of the Dry Creek Joint Union School District.

Dedication of these school sites, in combination with the General Plan Policies listed in Appendix C and the requirement in the Specific Plan that all landowners pay school impact fees would reduce the impact to a less-than-significant level.

**TABLE 4.12-26  
FULL PROJECT  
NORTH ROSEVILLE SPECIFIC PLAN  
STUDENT GENERATION IN THE DRY CREEK JOINT ELEMENTARY  
SCHOOL DISTRICT**

| Residential Type                                                                         | Number of Units | Students Per Unit |        | Number of Students (K-5) | Number of Students (6-8) |
|------------------------------------------------------------------------------------------|-----------------|-------------------|--------|--------------------------|--------------------------|
| Single Family (Detached)                                                                 | 1,568           | Grades K-5        | 0.3480 | 546                      | ----                     |
|                                                                                          |                 | Grades 6-8        | 0.1140 | ----                     | 179                      |
| Multi-family (Attached)                                                                  | 446             | Grades K-5        | 0.1710 | 76                       | ----                     |
|                                                                                          |                 | Grades 6-8        | 0.0900 | ----                     | 40                       |
| Total Students (K-5)                                                                     |                 |                   |        | 622                      | ----                     |
| Total Students (6-8)                                                                     |                 |                   |        | ----                     | 219                      |
| TOTAL STUDENTS Full Project (Grades K-8)                                                 |                 |                   |        | 841                      |                          |
| SOURCE: Dry Creek Joint Elementary School District; North Roseville Specific Plan, 1997. |                 |                   |        |                          |                          |



**TABLE 4.12-27  
FULL PROJECT  
NORTH ROSEVILLE SPECIFIC PLAN  
STUDENT GENERATION IN THE ROSEVILLE CITY SCHOOL DISTRICT**

| Residential Type                                                                                                                                                                   | Number of Units | Students Per Unit |        | Number of Students (K-6) | Number of Students (7-8) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|--------|--------------------------|--------------------------|
| Single Family (Detached)                                                                                                                                                           | 2,359           | Grades K-6        | 0.3993 | 942                      | ----                     |
|                                                                                                                                                                                    |                 | Grades 7-8        | 0.1339 | ----                     | 316                      |
| Multi-family (Attached)                                                                                                                                                            | 325             | Grades K-6        | 0.1193 | 39                       | ----                     |
|                                                                                                                                                                                    |                 | Grades 7-8        | 0.400  | ----                     | 130                      |
| Total Students (K-6)                                                                                                                                                               |                 |                   |        | 1,020                    | ----                     |
| Total Students (7-8)                                                                                                                                                               |                 |                   |        | ----                     | 446                      |
| TOTAL STUDENTS FULL PROJECT <sup>1</sup> (Grades K-8)                                                                                                                              |                 |                   |        | 1,466                    |                          |
| <sup>1</sup> Phase II would contribute 245 elementary (K-6) students and 23 middle (7-8) students.<br>SOURCE: Roseville City School District; North Roseville Specific Plan, 1997. |                 |                   |        |                          |                          |

## Libraries

|                               |                                               |
|-------------------------------|-----------------------------------------------|
| <b>IMPACT 4.12-18(B):</b>     | <b>Increased demand for library services.</b> |
| <b>SIGNIFICANCE:</b>          | Significant                                   |
| <b>MITIGATION MEASURE:</b>    | 4.12-4 (Contribute to library funding)        |
| <b>RESIDUAL SIGNIFICANCE:</b> | Less than significant                         |

The anticipated 6,541 new residents in Phase II of the NRSP area are expected to increase the demand for library services. The Full Project would contribute an estimated total of 12,533 residents. The branch library closest to Phase II would be the proposed library at Mahany Park. However, this library is intended to serve the demand of the residents of the approved Northwest Roseville Specific Plan, and the additional demand for library services created by residents in the Full Project may cause overcrowding of this library.

As discussed under Impact 4.12-18(A), the City may elect not to establish the fund, the impact could remain significant. The City General Plan policies include securing the development of additional library space regardless of the establishment of a city-wide library fund. Payment of fees for expanded library facilities from the Plan Area in conjunction with the Del Webb Specific Plan Area, could be used to construct a new library which would reduce any Full Project impacts on libraries to less than significant.

## Parks and Recreation

|                            |                                              |
|----------------------------|----------------------------------------------|
| <b>IMPACT 4.12-19(B):</b>  | <b>Increased demand for park facilities.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                        |
| <b>MITIGATION MEASURE:</b> | None required                                |

Development of Phase II would contribute an additional 6,541 residents for a Full Project population of 12,533 residents. Based on the General Plan standard of 9 acres per 1,000 residents, a minimum of 58.5 acres would need to be set aside for parks in Phase II. The Full Project designates six parks for a total of 108.8 acres and 193.2 acres of undeveloped open space. The Full Project total of 108.8 acres designated for parks and 193.2 acres designated for open space is sufficient to satisfy the demands generated by the Full Project. Table 4.12-28 shows the Full Project parkland credit. Therefore, this impact is less than significant.

## Cable and Television Services

|                            |                                                                      |
|----------------------------|----------------------------------------------------------------------|
| <b>IMPACT 4.12-20(B):</b>  | <b>Increased demand for cable television and telephone services.</b> |
| <b>SIGNIFICANCE:</b>       | Less than significant                                                |
| <b>MITIGATION MEASURE:</b> | None required                                                        |

Development of the Full Project would create an increased demand on current cable television and telephone service. As indicated in the discussion for Phase I, the cable television would be

TABLE 4.12-28

## FULL PROJECT DESIGNATED PARK AND OPEN SPACE

| Parks                     | Parcel # | Actual Acreage | Allowance | Park Credit  |
|---------------------------|----------|----------------|-----------|--------------|
| Woodcreek West Park       | WW-50    | 12.0           | 1:1       | 12.0         |
| Fiddymment Park           | W-50     | 13.0           | 1:1       | 13.0         |
| Fiddymment Park           | W-51     | 0.4            | 1:1       | 0.4          |
| Fiddymment Park           | W-52     | 0.3            | 1:1       | 0.3          |
| Fiddymment Park           | W-53     | 3.9            | 1:1       | 3.9          |
| North School Park         | DC-50    | 4.1            | 1:1       | 4.1          |
| Diamond Creek Park        | DC-51-54 | 30.5           | 1:1       | 30.5         |
| Commons Park              | M-50     | 2.7            | 1:1       | 2.7          |
| Pleasant Grove Creek Park | WN-50    | 26.0           | 1:1       | 26.0         |
| Pleasant Grove Creek Park | WN-51    | 15.9           | 1:1       | 15.9         |
| <b>TOTAL PARKS:</b>       |          | <b>108.8</b>   |           | <b>108.8</b> |
| Open Space                | DC-9b    | 1.9            | 1:10      | .20          |
| Open Space                | DC-80    | 6.8            | 1:10      | .68          |
| Open Space                | DC-81    | 13.5           | 1:10      | 1.3          |
| Open Space                | DC-82    | 1.3            | 1:10      | .13          |
| Open Space                | M-80     | 10.5           | 1:10      | 1.06         |
| Open Space                | M-81     | 2.9            | 1:10      | .3           |
| Open Space                | WN-80    | 6.8            | 1:10      | .68          |
| Open Space                | WN-81    | 10.8           | 1:10      | 1.08         |
| Open Space                | WN-82    | 9.2            | 1:10      | .92          |
| Open Space                | WN-83    | 1.5            | 1:5       | .3           |
| Open Space                | WN-84    | 1.1            | 1:10      | .1           |
| Open Space                | WN-85    | 15.2           | 1:10      | 1.5          |
| Open Space                | W-80     | 17.5           | 1:10      | 1.75         |
| Open Space                | W-81     | 10.0           | 1:10      | 1.0          |
| Open Space                | W-82     | 4.8            | 1:10      | 0.48         |
| Open Space                | WW-80    | 9.5            | 1:10      | 0.95         |
| Open Space (Wetland)      | WW-81    | 21.2           | 1:10      | 2.12         |
| Open Space (Wetland)      | WW-82    | 26.2           | 1:10      | 2.62         |
| Open Space                | WW-83    | 1.3            | 1:10      | 0.13         |
| Open Space (Promenade)    | WW-84    | 1.2            | 1:10      | 0.12         |
| Open Space (Promenade)    | WW-85    | 0.6            | 1:10      | 0.06         |
| Open Space (Promenade)    | WW-86    | 0.8            | 1:10      | 0.08         |



TABLE 4.12-28

**FULL PROJECT DESIGNATED PARK AND OPEN SPACE**

| <b>Parks</b>              | <b>Parcel #</b> | <b>Actual Acreage</b> | <b>Allowance</b> | <b>Park Credit</b> |
|---------------------------|-----------------|-----------------------|------------------|--------------------|
| Open Space (Promenade)    | WW-87           | 0.3                   | 1:10             | 0.03               |
| Open Space (Promenade)    | WW-88           | 0.3                   | 1:10             | 0.03               |
| Open Space (Promenade)    | WW-89           | 0.7                   | 1:10             | 0.07               |
| Open Space                | WW-90           | 1.7                   | 1:10             | 0.17               |
| Open Space                | WW-91           | 3.5                   | 1:10             | 0.35               |
| Open Space                | WW-92           | 2.4                   | 1:10             | 0.24               |
| Open Space                | WW-93           | 2.1                   | 1:10             | 0.21               |
| Open Space                | WW-94           | 3.0                   | 1:10             | 0.3                |
| Open Space                | WW-95           | 2.6                   | 1:10             | 0.26               |
| Open Space                | WW-96           | 1.8                   | 1:10             | 0.18               |
| Open Space                | WW-97           | 0.2                   | 1:10             | 0.18               |
| <b>TOTAL OPEN SPACE</b>   |                 | <b>193.2</b>          |                  | <b>19.58</b>       |
| <b>TOTAL FULL PROJECT</b> |                 | <b>302</b>            |                  | <b>128.38</b>      |

SOURCE: North Roseville Specific Plan, 1997.

provided by Jones Intercable and phone service would be provided by the Roseville Telephone Company. The existing facilities near the project site and the demand-responsive nature of cable television and telephone services would not create any significant impacts. Therefore, impacts to these services would be considered less than significant.

#### **4.12.5 MITIGATION MEASURES**

##### **WATER TREATMENT**

##### **Mitigation Measure 4.12-1: Restrict development until water treatment capacity increases.**

Mitigation Measure 4.12-1 applies to Impacts 4.12-4(A) and (B).

To ensure adequate water treatment capacity is available, the City of Roseville shall restrict each development within the Plan Area until adequate water treatment capacity is available.

##### **DEMAND FOR POLICE SERVICES**

##### **Mitigation Measure 4.12-2: Increase number of police officers.**

Mitigation Measure 4.12-2 applies to Impacts 4.12-11(A) and (B).

Based on the projected increase in the population of 5,992 residents in Phase I and 6,541 residents in Phase II for a Full Project total of 12,533 new residents, an additional 14.8 full-time officers would be required to service the new population. The City would fund these positions through increased general revenues generated by new development. With the proposed mitigation measure, the impact on police service would be considered less than significant.

##### **DEMAND FOR FIRE SERVICES**

##### **Mitigation Measure 4.12-3: Dedicate site or fund acquisition of new fire station.**

Mitigation Measure 4.12-3 applies to Impacts 4.12-12(A and B).

The Fire Department will determine the appropriate location for a new fire station to serve Phase I development. The new station is expected to be located either in the southwest portion of the Mourier 140 property or in the area designated light industrial to the east of the Diamond Creek property (Neighborhood A). In either case, the location of the station shall ensure that the entire Phase I area is within the Department's response time standard. The Applicant shall either dedicate the Mourier 140 site or provide for acquisition of the site in the light industrial area, based on the Fire Department's selection of a site. The fire station will be funded through the Proposed Project's payment of the construction tax. The Fire Department shall construct the station as needed to serve Phase I and other development.

As part of Phase I project approval, the City will identify timing for construction of the new fire station in Neighborhood D (Woodcreek West). Construction of the new fire station should be timed with the issuance of building permits.

## **LIBRARIES**

### **Mitigation Measure 4.12-4: Contribute to library funding.**

Mitigation Measure 4.12-4 applies to Impacts 4.12-18(A and B).

If the City establishes a city-wide financing mechanism to finance future library facilities, the landowners would participate in contributing their fair-share to the fund. This would reduce any impacts to libraries below a level of significance. Payment of fees for expanded library facilities from the Plan Area in conjunction with the Del Webb Specific Plan Area, could be used to construct a new library in the Plan Area. This would reduce any impacts on libraries to a less-than-significant level.



**TABLE 4.12-29****PUBLIC SERVICES AND UTILITIES RESIDUAL IMPACT SUMMARY TABLE**

| <b>Impact</b>                                                      | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
|--------------------------------------------------------------------|------------------------|-----------------------------|
| 4.12-1(A and B): Increased demand for domestic water.              | Less than significant  | Less than significant       |
| 4.12-2(A and B): Increased demand for domestic water conveyance.   | Less than significant  | Less than significant       |
| 4.12-3(A and B): Decreased water supply during drought periods.    | Less than significant  | Less than significant       |
| 4.12-4(A and B): Increased demand for domestic water treatment.    | Less than significant  | Less than significant       |
| 4.12-5(A and B): Increased demand on water distribution system.    | Less than significant  | Less than significant       |
| 4.12-6(A and B): Residual discharges to Dry Creek.                 | Less than significant  | Less than significant       |
| 4.12-7(A and B): Reduced demand on potable water.                  | Less than significant  | Less than significant       |
| 4.12-8(A and B): Increased use of reclaimed water.                 | Less than significant  | Less than significant       |
| 4.12-9(A and B): Increased demand on wastewater collection system. | Less than significant  | Less than significant       |
| 4.12-10(A and B): Increased demand on wastewater treatment system. | Less than significant  | Less than significant       |
| 4.12-11(A and B): Increased demand for police protection services. | Less than significant  | Less than significant       |
| 4.12-12(A and B): Failure to meet RFD response standards.          | Less than significant  | Less than significant       |
| 4.12-13(A and B): Increased solid waste generation.                | Less than significant  | Less than significant       |
| 4.12-14(A and B): Increased demand for electrical supply.          | Less than significant  | Less than significant       |

**TABLE 4.12-29****PUBLIC SERVICES AND UTILITIES RESIDUAL IMPACT SUMMARY TABLE**

| <b>Impact</b>                                                                                             | <b>Phase I Impacts</b> | <b>Full Project Impacts</b> |
|-----------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|
| 4.12-15(A and B): Increased demand for natural gas.                                                       | Less than significant  | Less than significant       |
| 4.12-16(A and B): Increased demand for school services in the Roseville Joint Union High School District. | Less than significant  | Less than significant       |
| 4.12-17(A and B): Increased demand for elementary school services.                                        | Less than significant  | Less than significant       |
| 4.12-18(A and B): Increased demand for library services.                                                  | Less than significant  | Less than significant       |
| 4.12-19(A and B): Increased demand for park facilities.                                                   | Less than significant  | Less than significant       |
| 4.12-20(A and B): Increased demand for cable television and telephone services.                           | Less than significant  | Less than significant       |

## ENDNOTES

1. Ed Kriz, Facilities Engineer, Environmental Utilities Department, City of Roseville, personal communication, March 26, 1997.
2. Ed Kriz, Op cit.
3. City of Roseville Comprehensive Land Use Element Update Project, Draft EIR, page 4.12-1, February, 1995. Cites the Spink Corporation, 1992.
4. Kelye McKinney, City of Roseville Environmental Utilities Department, Personal communication, December 2, 1996.
5. City of Roseville Comprehensive Land Use Element Update Project, Draft EIR, page 4.12-3, February, 1995. Cites the Spink Corporation, 1992.
6. City of Roseville Comprehensive Land Use Element Draft EIR, p. 4.12-3, February 1995.
7. City of Roseville Comprehensive Land Use Element Update Project, Draft EIR, page 4.12-3, February, 1995. Cites Buckle, 1993.
8. City of Roseville Comprehensive Land Use Element Update Project, Draft EIR, page 4.13-1, February, 1995. Cites the Spink Corporation, 1992.
9. Larry Buckle, Environmental Engineer, written communication, August 18, 1995.
10. City of Roseville Comprehensive Land Use Element Update Project, Draft EIR, page 4.13-1, February, 1995. Cites the City of Roseville Municipal Code Section 14.16.070.
11. City of Roseville Comprehensive Land Use Element Update Project, Draft EIR, page 4.13-1, February, 1995. Cites the Spink Corporation, 1992.
12. City of Roseville Comprehensive Land Use Element Update Project, Draft EIR, page 4.13-2, February, 1995. Cites Montgomery-Watson, 1994.
13. Chuck Knuthson, Captain, Roseville Police Department, personal communication, June 12, 1995.
14. Dee Dee Gunther, Administrative Analyst, City of Roseville Police Department, personal communication, June 12, 1995.
15. Nels Tahti, Administrative Analyst, Roseville Fire Department, personal communication, June 9, 1995.
16. Nels Tahti, Administrative Analyst, Roseville Fire Department, personal communication, June 9, 1995.



17. Nels Tahti, Administrative Analyst, Roseville Fire Department, personal communication, June 16, 1995.
18. Nels Tahti, Administrative Analyst, Roseville Fire Department, personal communication, June 9, 1995.
19. Comprehensive Land Use Plan Draft EIR, page 4.15-1, February 1995.
20. North Roseville Specific Plan, Administrative Draft, March 1997.
21. Terry Bosik, City of Roseville Solid Waste Division, personal communication, March, 1996.
22. Mike Ballard, City of Roseville, written communication, August 15, 1995.
23. Comprehensive Land Use Element, Draft Environmental Impact Report, p. 4-18-1, February, 1995.
24. City of Roseville Comprehensive Land Use Element, Draft Environmental Impact Report, p. 4.18-1, February 1995.
25. Shannon Walker, Secretary, Dry Creek Elementary School District, personal communication, June 9, 1995.
26. North Roseville Specific Plan, Administrative Draft, March 1997.
27. Del Webb Specific Plan Draft Environmental Impact Report, p. 6-13, September 1993.
28. North Roseville Specific Plan, Administrative Draft, p. 6-24, May 25, 1995.
29. Del Webb Specific Plan Draft EIR, page 7-3, September 1993.
30. City of Roseville, Comprehensive Land Use Element Update Project, page 4.16-1, February, 1995.
31. The Spink Corporation, *General Plan Update Water System Study*, August 30, 1993.
32. Derrick Whitehead, Op Cit.
33. Sue Nickerson, Director, City of Roseville, Library Department, personal communication, June 8, 1995.
34. Ed Kriz, Op. cit.
35. Dee Dee Gunther, Administrative Analysis, Roseville Police Department, personal communication, June 12, 1995.

36. Nels Tahti, Administrative Analyst, Roseville Fire Department, personal communication, June 15, 1995.
37. Grant Kageta, Project Manager, Pacific Gas and Electric, personal communication, July 6, 1995.
38. Written communication from Roseville Joint Union High School District, Denny Jones, Director of Facilities Management to Nela Luken, City of Roseville, December 6, 1996.
39. Ibid.
40. City of Roseville, *Roseville Regional Wastewater Treatment Service Area Master Plan, Draft EIR*, May 1996.
41. Grant Kageta, Project Manager, Pacific Gas and Electric, personal communication, July 6, 1995.





---

---

## ***5.0 OTHER CEQA CONSIDERATIONS***

---

---



---

---

## **5. CEQA CONSIDERATIONS**

---

---

### **5.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS**

Under CEQA, an EIR must analyze the extent to which a plan's primary and secondary effects would commit resources to uses that future generations will probably be unable to reverse [CEQA Guidelines Section 15126(f); 15127].

Implementation of the Proposed Project would result in the long-term commitment of resources of the Plan Area to urban land use. The most notable significant irreversible impacts are a reduction in natural vegetation and wildlife communities; commitment of energy resources in the form of natural gas and electricity; alteration of the visual character of the Plan Area; increased demand on public services and utilities, particularly water supply; and increased generation of pollutants and the short-term commitment of non-renewable and/or slowly renewable natural and energy resources such as lumber and other forest products, mineral resources, and water resources during construction activities. These irreversible impacts, which are, as yet, unavoidable consequences of urban growth, are described in detail in the appropriate sections of this EIR.

### **5.2 CUMULATIVE IMPACTS**

#### **5.2.1 Introduction**

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the Proposed Project. This assessment involves examining project-related effects on the environment in the context of similar effects that have been caused by past or existing projects, and the anticipated effects of future projects. Even when project-related impacts are individually minor, the cumulative effects of these impacts, in combination with the impacts of other projects, could be significant under CEQA and must be addressed [CEQA Guidelines, §15355(b)].

#### **5.2.2 Development Considered in Cumulative Impact Analysis**

The development assumption used for cumulative impact analysis for the Proposed Project and alternatives includes existing conditions, the General Plan 2010 Market/Specific Plan Buildout scenario, the Hewlett-Packard Campus Master Plan, the NEC Semiconductor Manufacturing Expansion Project, and full buildout of three of the City's urban reserve areas: the North Roseville Specific Plan (the Proposed Project), the Highland Reserve North Project, and the Stoneridge Specific Plan (East Area). Land use assumptions for the cumulative analysis are shown in Table 5.2-1.



TABLE 5.2-1

## CUMULATIVE ASSUMPTIONS

| Area                                             | Residential        |                   |                 | Non-Residential   |                   |                      |
|--------------------------------------------------|--------------------|-------------------|-----------------|-------------------|-------------------|----------------------|
|                                                  | Single Family (du) | Multi Family (du) | Retirement (du) | Retail (sq. ft.)  | Office (sq. ft.)  | Industrial (sq. ft.) |
| Infill, North Industrial and Specific Plan Areas |                    |                   |                 |                   |                   |                      |
| Infill <sup>1</sup>                              | 11,004             | 5,348             | 0               | 3,359,039         | 2,178,248         | 3,695,778            |
| NEC Electronics campus                           | 0                  | 0                 | 0               | 0                 | 0                 | 2,221,000            |
| North Industrial <sup>2</sup>                    | 0                  | 0                 | 0               | 0                 | 0                 | 1,570,649            |
| HP Master Plan                                   | 0                  | 0                 | 0               | 248,000           | 0                 | 4,002,000            |
| NCRSP <sup>3</sup>                               | 2,266              | 1,399             | 0               | 3,137,040         | 1,903,223         | 1,006,323            |
| SERSP                                            | 1,779              | 1,549             | 0               | 745,224           | 1,150,990         | 0                    |
| NWRSP                                            | 6,107              | 2,827             | 0               | 1,392,501         | 710,769           | 0                    |
| NERSP                                            | 613                | 795               | 0               | 2,331,359         | 4,409,876         | 79,671               |
| DWRSP                                            | 0                  | 0                 | 3,500           | 199,505           | 0                 | 0                    |
| Urban Reserve                                    |                    |                   |                 |                   |                   |                      |
| Highland Reserve North (Phase I)                 | 612                | 420               | 0               | 753,240           | 145,839           | 0                    |
| Highland Reserve North (Phase II)                | 578                | 360               | 0               | 403,932           | 186,154           | 0                    |
| North Roseville (Phase I) <sup>4</sup>           | 1,848              | 275               | 400             | 210,308           | 234,701           | 0                    |
| North Roseville (Phase II)                       | 2,129              | 446               | 0               | 26,136            | 54,204            | 0                    |
| Stoneridge (Phase I)                             | 917                | 83                | 0               | 472,190           | 716,126           | 0                    |
| Stoneridge (Phase II)                            | 1,196              | 230               | 0               | 0                 | 0                 | 0                    |
| <b>Total (without Urban Reserve)</b>             | <b>21,769</b>      | <b>11,918</b>     | <b>3,500</b>    | <b>11,412,668</b> | <b>10,353,106</b> | <b>12,575,421</b>    |
| <b>Total (with Urban Reserve)</b>                | <b>29,049</b>      | <b>13,732</b>     | <b>3,900</b>    | <b>13,278,474</b> | <b>11,690,130</b> | <b>12,575,421</b>    |

## NOTES:

<sup>1</sup> Excludes revised NEC Electronics campus.<sup>2</sup> Excludes HP Master Plan.<sup>3</sup> Includes unit transfer of 732 Multi-family dwelling units to Highland Reserve North.<sup>4</sup> Eskaton Village shown as retirement units.

SOURCE: DKS, 1996.

For the cumulative analysis in this EIR, it is assumed that the residential units in the Proposed Project, Highland Reserve North and the Stoneridge Specific Plan would be in addition to the 39,200 units currently allocated for development by the City. However, not all of the allocated units are likely to be built, and if some of those units were transferred to any of the three plan areas, it would lessen the severity of impacts dependent on the number of dwelling units. In order to provide a conservative analysis, this EIR assumes that all units are additive.

#### General Plan 2010 Market/Specific Plan Buildout

Based on City growth projections, it is anticipated that Roseville's supply of residential land use, as allocated in the General Plan, will be exhausted prior to the year 2005. At the same time, the City's inventory of non-residential uses, particularly industrial, exceeds 2010 market projections for absorption. A 2010 Market/Specific Plan Buildout absorption scenario has been developed to analyze impacts associated with the existing General Plan. It assumes 2010 market conditions of the City's infill area and buildout of the City's five existing specific plans including the Northeast Roseville Specific Plan, the Southeast Roseville Specific Plan, the North Central Roseville Specific Plan, the Northwest Roseville Specific Plan, and the Del Webb Specific Plan. In total, this absorption scenario assumes 21,769 single family residential units, 11,918 multi-family residential units, and 3,500 retirements units. For non-residential, this scenario assumes roughly 11.2 million square feet of retail space, 10.3 million square feet of office space, and 6.3 million square feet of industrial space.

#### Hewlett-Packard Campus Master Plan

The Hewlett-Packard Master Plan Project (Master Plan) is located west of the Proposed Project on Foothills Boulevard. The Hewlett-Packard project site encompasses approximately 500 acres. The Hewlett-Packard project is a master plan for comprehensive planning of the undeveloped portion of Hewlett-Packard's existing campus in Roseville. Hewlett-Packard's current facilities occupy approximately 200 acres of the 500-acre site. The Hewlett-Packard Master Plan establishes a master site, grading, drainage, and utility plan, and design guidelines. The master plan buildout would result in an ultimate development scenario of 4 million square feet of manufacturing (already built), distribution, administrative, research and development facilities, support maintenance buildings, and 248,000 square feet of commercial land uses for a total of 4.25 million square feet. There would be approximately 13,800 people employed. The development would increase the existing campus by 2.92 million square feet over a 20 to 25 year time frame. The number of employees would increase by 9,200.

Existing and future public roadways adjacent to the project site include Foothills Boulevard, Blue Oaks Boulevard, and Woodcreek Oaks Boulevard. The future roads are part of the City's circulation system as outlined in the Roseville 2010 General Plan.

The overall land use designation is Light Industrial and 2.8 acres would be rezoned to Community Commercial. There would be an open space/wetland preserve land use of approximately 44 acres. This designation is intended to contain the 100-year floodplain of



Pleasant Grove Creek. Other elements of the Master Plan include projected public services, facilities trip generation rates, and chemical usage. The Master Plan is available for review at the City's Planning Department.

#### NEC Semiconductor Manufacturing Expansion Project

The NEC Semiconductor Manufacturing Facility is located west of the Proposed Project on Foothills Boulevard. The NEC project (i.e., the M-2 Line) site encompasses approximately 50 acres. The NEC project is the expansion and operation of an existing 73-acre semiconductor manufacturing complex in Roseville. The expansion would produce advanced Dynamic Random Access Memory (DRAM) integrated circuits and microprocessors, commonly known as computer chips. Project buildout would result in the ultimate development scenario of a new 750,000 square foot building housing manufacturing, testing, and administrative and managerial services. The number of employees would increase by 1,250.

Existing public roadways in the vicinity of the project site include Foothills Boulevard, Blue Oaks Boulevard, and Pleasant Grove Boulevard. The overall land use designation of the project site is Light Industrial. Surrounding land uses include commercial, low-density residential, and business park. Copies of the EIR and the City's application processing file are available for review at the City's Planning Department.

#### Full Buildout of Urban Reserve Areas

The City of Roseville Planning Department is processing three specific plans for new mixed-use development projects within three urban reserve areas of the City. One of these three is the North Roseville Specific Plan which is described in Chapter 3 and analyzed in Chapter 4 of this Draft EIR. The NRSP is included in the levels of development considered in this cumulative impact analysis. The two other specific plans considered in this cumulative impact analysis are the Highland Reserve North Project and the Stoneridge Specific Plan (East Area). Land uses for these two specific plans were based upon information available during preparation of this Draft EIR and are described below.

The Highland Reserve North (HRN) Project consists of the urban reserve portion of the North Central Roseville Specific Plan area. The HRN area encompasses approximately 615 acres immediately north of State Route 65. The land uses include a total of 1,190 single and 780 multi-family residential units, commercial, schools, parks, and open spaces. The Draft EIR for the project is currently being circulated for public review.

The Stoneridge Specific Plan is located along the eastern boundary of the City of Roseville within the northern and eastern portion of the Northeast Roseville Specific Plan, currently designated as urban reserve area. The project consists of approximately 653 acres adjacent to Sierra College Boulevard. The Specific Plan proposes approximately 2,100 single family residential units and 313 multi-family residential units. For non-residential uses, the project proposes approximately 716,000 square feet of office space. A Draft EIR is currently being prepared for this project and



preliminary copies of the Specific Plan are available for review at the City's Planning Department.

### **5.2.3 Cumulative Impact Assessment**

Cumulative development would result in cumulative impacts on some resources that would be significant and more severe than impacts caused by the NRSP alone. Significant cumulative impacts would occur for land use, geology, soils and seismicity, hydrology and water quality, biological resources, cultural resources, visual quality, hazardous materials, transportation, air quality, noise, and public services. Impacts in all areas except hydrology and water quality, biological resources, visual quality, transportation, air quality, noise and public services are mitigable with the measures identified in Chapter 4. It should be noted that for each of these subject areas, the potential for significant cumulative impacts already exists, regardless of whether or not the NRSP is approved. Nevertheless, the NRSP would contribute to cumulative conditions, creating the cumulative impacts described on the pages that follow.

#### **Land Use**

The cumulative context for agricultural land conversion would be the region as a whole. Within the region, a majority of agricultural land has been identified as Farmland of Local Importance and Grazing land. No cumulative context exists for analyzing the compatibility between land uses or the expansion of the sphere of influence and annexation is the City as a whole.

#### **Agricultural Land Conversion**

The Proposed Project and other areas approved for future development contain only Farmland of Local Importance and grazing land. Given that little or no prime farmland falls within the Plan Area or other areas slated for development within the City, **cumulative impacts are considered less than significant.**

#### **Expansion of Sphere of Influence and Annexation**

The NRSP would require annexation of 7.6 acres of adjacent land in Placer County, in order to accommodate expansion of the Fiddymment Road right-of-way. The annexation for the Proposed Project could add to the annexation of right-of-way in the Del Webb Specific Plan area for a similar widening of Fiddymment Road. Impacts associated with these future annexations would likely depend on their consistency with Placer County Local Agency Formation Commission Guidelines and the General Plans of the City and of Placer County. These sources identify certain criteria for evaluating and approving annexations, and any annexation would be expected to be processed in accordance with such criteria and with the requirements of CEQA. **Therefore, significant cumulative impacts are not anticipated to occur with these annexations.**

### Compatibility Between Adjacent Land Uses

Impacts regarding the compatibility of adjacent land uses have been identified within the Plan Area. Future development would likely cause similar impacts. Protections to ensure that adjoining land uses would be compatible are contained within the General Plan, the City's Community Design Guidelines, and the Zoning Ordinance (Design Review Permit procedures are contained in the Zoning Ordinance). These protections include proper screening, berming, buffering, building placement, site access, activity scheduling, and so on. Future development within the City would be subject to these protections; **therefore, significant cumulative impacts regarding conditionally compatible adjacent land uses are not expected to occur.**

### **Population, Employment and Housing**

The cumulative context for Population, Employment and Housing is the City as a whole

#### Increase in the City's Population and Employment

The NRSP would provide 5,098 housing units, which are expected to accommodate a population of approximately 12,533. In addition, 1,395 employees are anticipated to be generated by the Proposed Project. Construction of the project would provide additional jobs, albeit for the short term only. These increases would be in addition to the population and employment generated by other cumulative development in the City. **Changes in population and employment are not, in and of themselves, considered adverse environmental effects, so the cumulative impacts are considered less than significant.** The environmental effects of such increases are discussed in the technical sections of this DEIR (see Chapter 4 and below).

#### Changes in Jobs/Housing Balance

The timing and ratio of employment expansion and residential development must be monitored to prevent a shortfall of jobs for new residents or of nearby, affordable housing for the expected number of workers. The change in the jobs/housing balance would depend on the type of developments approved and the timing of residential versus non-residential development. Short-term imbalances could occur, particularly if commercial and industrial uses do not develop as quickly as residential uses, which may be likely.

General Plan policy specifies that 80 percent of workers should be housed within an eight-mile commute distance. Future development would require analysis of the impact on the City's jobs/housing balance, and consistency with this policy. **In the longer term, cumulative impacts on the jobs/housing balance would not be expected to occur.**

#### Affordable Housing Goal

The City has a number of tools available to ensure that new residential developments comply with Roseville's goal that 10 percent of new units be affordable for very-low, low, and middle income households. The Proposed Project itself meets the City's ten percent goal. Other



residential projects would be subject to the ten percent goal as well. **Therefore, with cumulative development would have no significant cumulative impacts on the City's Affordable Housing Goal.**

### **Soils, Geology and Seismicity**

The context for the evaluation of potential cumulative impacts on geology and seismicity is the City of Roseville.

Cumulative development in the Roseville area, including the proposed NRSP, would increase the number of people living, working and traveling through the region who would be exposed to seismic hazards. Although seismic risk in the City of Roseville is low, the potential effects from a large seismic event from regional faults cannot be entirely dismissed. Therefore, this is considered a significant cumulative impact. However, the magnitude of this impact would be mitigated to a less-than-significant level with implementation of the City of Roseville General Plan Policies SA-1, SA-2 and SA-4, related to seismic hazards.

Cumulative development in the Roseville area, including the proposed NRSP, would involve grading activities that would remove surface vegetation, alter topography and potentially expose soils to greater erosion potential. Additionally, cumulative development could include development on lands exhibiting geologic (Mehrten formation) and/or soils (high expansive potential, slow permeability) constraints. However, implementation of the City Roseville General Plan Policies SA-1, SA-3, SA-5 and SA-6 requiring project design review and implementation of grading standards, compliance with site-specific geotechnical evaluation (Mitigation Measure 4.3-1), and compliance with City Improvement Standards could reduce this impact to a less-than-significant level. **Therefore, cumulative impacts related to soils, geology, and seismicity would be less than significant.**

### **Hydrology and Water Quality**

The context for the evaluation of potential cumulative impacts on flood conditions and water quality is the Pleasant Grove Creek watershed and the Dry Creek watershed.

#### Exacerbated Flood Conditions

Cumulative development in the Roseville area, which includes the Pleasant Grove Creek Watershed, would increase the amount of impervious surface cover, which in turn could raise the rate and amount of runoff. Increased runoff to the streams in the watershed would raise the water surface elevation exacerbating flooding conditions. As described in the Hydrology and Water Quality setting, the City of Roseville has developed several flood mitigation programs and maintains several flood control projects within its jurisdiction. Through its Floodplain Designation Policy No.2 and General Plan policies, the City restricts the placement of fill in floodplains and floodways within the City's jurisdiction. Roseville has a flood alert and early warning system to monitor stream flows and precipitation through a network of computer-linked sensors located in



stream channels. When water levels reach critical stages, measures are implemented including portable dikes, traffic diversions, and flood-warning broadcasts.

The City developed a regional flood control plan for Pleasant Grove Creek along the western portion of the City. The plan includes provisions for construction of a regional stormwater retention pond in western Placer County downstream of the Plan Area and channel improvements between the regional retention pond and the confluence of Pleasant Grove and Kaseberg Creeks. A feasibility study was prepared in May 1990 to develop the cost basis for such a facility.<sup>1</sup> All new development within the watershed in the City of Roseville are assessed an impact fee for the acquisition of land and construction of the basin. The fees are based on incremental increase in runoff volume coming from each proposed development. At the time the study was prepared, some developments, such as Del Webb and the NRSP, were not addressed in the study. For such developments, the City of Roseville requires that the developer demonstrate that the planned retention facility can accommodate the additional flows from the new development. Since the City began collecting fees for a retention facility, the Placer County Flood Control District has determined that a regional detention basin may not be the most cost-effective method of providing downstream flood protection. Other flood control measures include project-specific flood controls, purchasing flood easements, floodproofing structures or providing insurance to at-risk property owners. Once specific strategies for flood control are identified by Placer and/or Sutter County, the City may use its fees to participate in those strategies to construct a City retention facility.

The City of Roseville has also initiated the Cirby-Linda-Dry Creek Flood Control Project to provide flood protection for properties in the Nolte future floodplain. The proposed flood protection measures include modifications to sections of the stream courses that would reduce the effects of existing artificial constrictions to increase the channels capacity to carry flood flows through the City. A fee program similar to that for the Pleasant Grove Creek watershed exists for the Dry Creek watershed.

General Plan policies require that individual projects mitigate their contribution of increased surface water flows to minimize the potential for increased on- and off-site flooding. In addition, they require that the City implement programs to manage land uses in the City, and establish programs to manage regional flooding concerns. Increases in flooding are attributed to development not only within the City limits, but in the watershed areas outside of the City limits.

Implementation of General Plan policies and on-site detention basins would reduce site-specific contributions to regional flood levels. However, the City of Roseville cannot fully mitigate flood impacts alone. **Therefore, until a regional flood control plan has been implemented, this would be considered a significant and unavoidable cumulative impact.**

#### Decreased Water Quality

Cumulative urban development would involve soil-disturbing construction activities such as vegetation removal, grading, and excavation. These soil disturbances would expose soil to wind- and water-generated erosion, possibly at accelerated rates. Therefore, surface runoff would carry increased sediment loads. As previously described, sediment from erosion can have long and

short-term water quality effects including increased turbidity, which could result in adverse impacts on fish and wildlife habitat, reduced water pump life due to abrasion, impaired recreation and aesthetic values, and increased flooding hazard due to reduced channel capacity.

Urban development results in increased impervious surfaces which increase the rate and amount of runoff and can alter existing surface water quality. The primary sources of water pollution includes runoff from roadways and parking lots, runoff from landscaping areas, industrial activities (including wastewater treatment plants), non-storm water connections to the drainage system, accidental spills and illegal dumping. Runoff from roadway and parking lots could contain levels of oil, grease, and heavy metals. Runoff from landscaped areas could contain concentrations of nutrients, i.e. fertilizers and pesticides.

The General Plan contains policies that require that erosion control plans be prepared and approved by the City to reduce water quality impacts during construction activities. The General Plan also requires that urban runoff measures, including BMPs, and buffer areas be implemented as part of individual project development to protect water quality from urban development.

Implementation of General Plan Policies and compliance with applicable State General Permit requirements for storm water runoff would reduce potential degradation of receiving water quality; however, the conveyance of urban pollutants to receiving waters would not be eliminated. **Therefore, cumulative water quality impacts would remain significant and unavoidable.**

## Biological Resources

The cumulative context for the evaluation of potential cumulative impacts on biological resources including habitat areas is development assumed under the City of Roseville General Plan.

The Proposed Project would result in significant cumulative impacts to biological resources. Mitigation measures are discussed in detail in Chapter 4.5 that would reduce (but not eliminate) some significant impacts to biological resources from the Proposed Project. These measures include avoiding sensitive areas, and replacing lost or damaged resources. Even with these mitigation measures, a substantial change in habitat conditions would result as a consequence of the area transitioning into an urban environment with cumulative development. Similar impacts would result from other future development. The amount of undeveloped habitat available for wildlife use decreases as development occurs. As the amount of habitat decreases, wildlife species that are incompatible with the urban environment will be displaced.

Significant unavoidable impacts would occur from cumulative development with respect to the loss of oak and riparian woodlands, annual grasslands, vernal pools, and seasonal wetlands and other jurisdictional waters of the U.S.; fragmentation of wildlife habitat; diminished wildlife diversity as a result of habitat conversion; interruption and loss of wildlife movement corridors; and the loss of habitat potentially supporting sensitive plant and animal species. The General Plan contains numerous policies relating to protection and enhancement of biological resources including preserving and rehabilitating continuous riparian corridors, limiting access to sensitive areas, and preserving native oak trees and oak woodlands. Impacts of cumulative development on biological resources would be reduced with implementation of existing General Plan policies



and other existing biological regulatory programs (e.g., 404 permitting, endangered species protection, etc.). **Nonetheless, significant cumulative impacts to biological resources would still occur.**

### Cultural Resources

The cumulative context for the evaluation of potential cumulative impacts on cultural resources is the City of Roseville.

Development of the project site could result in the damage or destruction of known archaeological and historical resources, as well as any existing undiscovered subsurface sites of artifacts. Archival data reveals that the Roseville vicinity contains a relatively wide array of both prehistoric and historic cultural resources. Numerous laws, regulations, and statutes, on both the federal and state levels, seek to protect and target the management of cultural resources. In addition, the Roseville General Plan provides local policies that safeguard cultural resources from unnecessary impacts. These policies include the implementation of inventory and evaluation projects and seek consultation with qualified archaeologists in the event that previously undiscovered cultural materials are accidentally exposed. **With implementation of the General Plan's policies and the mitigation measures shown in Section 4.6, the potential for significant cumulative impacts on cultural resources would be considered less than significant.**

### Visual Quality

The cumulative context for the evaluation of potential cumulative impacts on visual quality is the City of Roseville and surrounding area.

The Proposed Project would contribute to the cumulative loss of open, undeveloped areas. The landscape and visual character of the region is being substantially altered, because much of the land slated for development under the proposed and related projects is currently undeveloped and naturally scenic. **The conversion of open space and the alteration of the existing landscape would be widespread if all related projects are developed. This is considered a significant cumulative impact.**

### Hazardous Materials and Public Safety

The cumulative scenario for hazardous materials and public safety is the City, including Hewlett-Packard and other industrial facilities, and existing and planned residential neighborhoods south.

#### Increased Use of Hazardous Materials

The Proposed Project, in conjunction with cumulative development in the City, would include areas designated for commercial uses. Cumulative development would also include new light industrial uses. This type of development would increase the use of hazardous materials within



the area, resulting in potential health and safety effects related to hazardous materials use. Associated health and safety risks are generally limited to those individuals using the materials or to persons in the immediate vicinity of the materials. For the most part, potential impacts associated with project development would be confined to the light industrial or commercial areas. However, cumulative development in the City of Roseville, Rocklin, or South Placer County (e.g., Sunset Industrial Area) could result in more people being exposed to hazardous materials. **Implementation of General Plan policies and compliance with applicable hazardous materials management laws and regulations would reduce this cumulative impact to a less-than-significant level.**

#### Exposure Due to Increased Hazardous Materials Transportation

Development in the City of Roseville, including the Plan Area, would result in a cumulative increase in hazardous materials transportation in the area, which could expose greater numbers of people to increased risks in the event of an inadvertent release or spill.

Stringent regulatory requirements apply to the common carriers that would handle the deliveries and transport of hazardous materials to and from the project area. General Plan Policy SE-3 ensures continued response to incidents occurring on Union Pacific property (formerly Southern Pacific). General Plan Policy SE-4 calls for development of specific routes limiting pick-up and delivery of hazardous materials during peak traffic hours. While this policy does not eliminate the potential for truck accidents and resulting spills, it would reduce the frequency of occurrences and would limit the number people that could be exposed. **The combination of these measures and compliance with applicable laws and regulations would result in less-than-significant cumulative impacts associated with the transport of hazardous materials within the region.**

#### **Transportation and Circulation**

For the traffic analysis, the cumulative impact approach is structured upon a revised version of the 2010 Market/Specific Plan Buildout scenario of the existing General Plan. The transportation system and land use assumed under this scenario is described in this section, followed by a discussion of the transportation impacts of cumulative development. For a discussion of assumptions and modeling process, please see Chapter 4.9.

Outside the City of Roseville, the same transportation improvements under the 2010 Market/Specific Plan Buildout analysis for the General Plan Update EIR were assumed for the cumulative impact approach. These included the extension of light rail to Roseville with a substantial “feeder” bus system to the light rail stations plus expansion of the Capital Corridor intercity rail line to include service between Colfax and the Bay Area. The assumed roadway improvements are generally consistent with PCTPA’s Regional Transportation Plan (RTP). That roadway system includes improvements to a number of major arterial roadways in South Placer County, and some improvements to the State’s freeway system. It includes the widening of I-80 to include high-occupancy vehicle (HOV) lanes between Sacramento and Rocklin, the widening of SR-65 between Roseville and Lincoln, and the SR-65 Lincoln Bypass. The extension of light rail from Antelope to Roseville and the widening of I-80 to accommodate HOV lanes represent

“unfunded” improvements in the RTP; however, their inclusion is consistent with the assumptions used for the 2010 Market/Specific Plan Buildout scenario in the General Plan Update EIR.

The light rail extension to Roseville from Antelope is estimated to cost about \$111 million to construct plus an additional \$3 million annually to operate. This extension was included by the Sacramento Area Council of Governments (SACOG) in their 1993 Metropolitan Transportation Plan (MTP) “even though Placer County officials haven’t endorsed any new revenue-raising measures.” SACOG further states that “the Sacramento Regional Transit District has stated it would finance this project based on the expected funding generated for the District by the statewide and Sacramento County tax initiatives recommended in this plan” (the MTP).

The 2010 Market/Specific Plan Buildout scenario in the existing General Plan Update EIR has been subsequently revised twice. The first update was due to the Del Webb Specific Plan EIR. The second update was to revise land use assumptions to reflect a more accurate floor-area-ratio (FAR) for retail and office land uses and revise assumptions on dwelling units and acreage for some parcels in the specific plan areas of the City. This revised land use was analyzed using the same roadway network identified in the General Plan for the 2010 Market/Specific Plan Buildout scenario. The following issues were identified from this analysis:

- As required for the 2010 Market/Specific Plan Buildout scenario in the General Plan Update EIR, the intersections of Roseville Parkway/Pleasant Grove Boulevard, Roseville Parkway/Taylor Road, and Pleasant Grove Boulevard/Washington Boulevard would continue to require grade separation in order to operate at LOS “C” or better conditions under the revised assumptions.
- At-grade intersection improvements assumed as mitigations in the General Plan Update EIR for the 2010 Market/Specific Plan Buildout scenario are also assumed for the revised 2010 Market/Specific Plan Buildout. However, using the revised assumptions described above, the following additional intersections would operate at LOS “D” or worse under the revised 2010 Market/Specific Plan Buildout assuming the same improvements in the General Plan Update EIR (these intersections were originally estimated to operate at LOS “C” or better under the 2010 Market/Specific Plan Buildout scenario in the General Plan Update EIR):
  - Taylor Road/Eureka Road;
  - Sunrise Avenue/Eureka Road;
  - Sierra College Boulevard/Roseville Parkway;
  - Riverside Drive/I-80 westbound off-ramp;
  - Washington Boulevard/Oak Avenue;
  - Eureka Road/Lead Hill Boulevard; and
  - Sierra College Boulevard/Eureka Road.
- Traffic impacts of the 2010 Market/Specific Plan Buildout scenario were not fully mitigated in the General Plan EIR. Several intersections would operate at LOS “D” or worse conditions under this scenario, and no feasible improvements were identified that



could improve their capacity sufficiently to meet the City's LOS "C" policy. With the subsequent revisions to the 2010 Market/Specific Plan Buildout scenario, the additional intersections identified above also could not be fully mitigated. This represents a significant and unavoidable impact of the revised existing 2010 Market/Specific Plan Buildout scenario.

- The following intersections were not fully mitigated under the revised 2010 Market/Specific Plan Buildout scenario:
  - Sunrise Avenue/Cirby Way;
  - Rocky Ridge Drive/Douglas Boulevard;
  - Roseville Parkway/Douglas Boulevard;
  - Eureka Road/Douglas Boulevard;
  - Sierra College Boulevard/Douglas Boulevard;
  - Riverside Drive/I-80 westbound off-ramp;
  - Taylor Road/Eureka Road;
  - Sunrise Avenue/Eureka Road;
  - Washington Boulevard/Oak Avenue; and
  - Riverside Drive/Cirby Way.

Daily traffic volumes under this revised 2010 Market/Specific Plan Buildout scenario are shown in Figure 5.2-1.

The revised 2010 Market/Specific Plan Buildout scenario was then further modified to include the land use assumptions in the Hewlett-Packard Master Plan EIR and the NEC Facility Expansion EIR. The land use assumptions of the proposed Highland Reserve North and Stoneridge Specific Plans were also incorporated to represent growth in the remaining portions of the City's Urban Reserve see Table 5.2-1. Outside the City of Roseville, the Twelve Bridges development was added in the City of Lincoln.

Under the cumulative impact approach, the Proposed Project was added to the development levels described above. Using the same transportation system assumptions as the revised 2010 Market/Specific Plan Buildout scenario, the Hewlett-Packard Master Plan and the NEC Facility expansion and including the proposed circulation systems of the Highland Reserve North and Stoneridge Specific Plans and the Proposed Project, the analysis of the cumulative condition yielded the following transportation issues.

Table 5.2-2 summarizes the differences in intersection operation between the 2010 Market scenario and cumulative with project scenario. The following intersections that would operate at LOS "D" or worse and were not fully mitigated under the revised 2010 Market scenario would also operate at LOS "D" or worse under the cumulative condition and cannot be fully mitigated using the normally accepted, maximum feasible, at-grade improvements:

- Sierra College Boulevard/Douglas Boulevard;
- Rocky Ridge Drive/Douglas Boulevard; and
- Roseville Parkway/Douglas Boulevard.





North Roseville  
Specific Plan EIR

FIGURE 5.2-1

**Key:**

|          |                                                           |
|----------|-----------------------------------------------------------|
| 20,000   | Cumulative Condition                                      |
| (10,000) | 2010 Market/Specific Plan<br>Buildout in General Plan EIR |





| TABLE 5.2-2                                                                |                                    |                         |
|----------------------------------------------------------------------------|------------------------------------|-------------------------|
| SUMMARY OF INTERSECTIONS OPERATING AT UNACCEPTABLE CONDITIONS <sup>1</sup> |                                    |                         |
| Intersections                                                              | 2010 Market/Specific Plan Buildout | Cumulative With Project |
| Sunrise Avenue/Cirby Way                                                   | ▲                                  |                         |
| Rocky Ridge Drive/Douglas Boulevard                                        | ▲                                  | ▲                       |
| Roseville Parkway/Douglas Boulevard                                        | ▲                                  | ▲                       |
| Eureka Road/Douglas Boulevard                                              | ▲                                  |                         |
| Sierra College Boulevard/Douglas Boulevard                                 | ▲                                  | ▲                       |
| Riverside Drive/I-80 westbound off-ramp                                    | ▲                                  |                         |
| Taylor Road/Eureka Road                                                    | ▲                                  |                         |
| Sunrise Avenue/Eureka Road                                                 | ▲                                  |                         |
| Washington Boulevard/Oak Avenue                                            | ▲                                  |                         |
| Riverside Drive/Cirby Way                                                  | ▲                                  |                         |
| <sup>1</sup> LOS D or worse.<br>SOURCE: DKS Associates, 1996.              |                                    |                         |

The remaining intersections that operated at LOS “D” or worse under the revised 2010 Market/Specific Plan Buildout would operate at LOS “C” or better under the cumulative condition. These intersections are:

- Sunrise Avenue/Cirby Way;
- Eureka Road/Douglas Boulevard;
- Riverside Drive/I-80 westbound off-ramp;
- Taylor Road/Eureka Road;
- Sunrise Avenue/Eureka Road;
- Washington Boulevard/Oak Avenue; and
- Riverside Drive/Cirby Way.

This appears to be due to a significant redistribution of regional traffic due to the extensive development of the northern and western portions of the City under the cumulative condition.

Under the cumulative condition, the following roadway segments would operate of LOS “D” or worse on the basis of p.m. peak hour traffic volume-to-capacity ratio (the total number of through lanes assumed for the segment is also shown):

- Harding Boulevard between SR-65 and Roseville Parkway (6 lanes); and
- Eureka Road between Sunrise and I-80 (4 lanes).

Daily traffic volumes under cumulative conditions are shown in Figure 5.2-1. **Cumulative impacts related to transportation are anticipated to be significant with or without implementation of the Proposed Project; however, cumulative traffic conditions would be less severe with the project than without it.**

### Air Quality

The cumulative air quality context is the Sacramento Valley Air Basin. The air quality analysis is based on the traffic modeling described in section 4.9, Transportation and Circulation.

#### Construction Emissions

Cumulative development would result in construction emissions from earthmoving activities, heavy equipment operation, workers traveling to and from the construction sites, and miscellaneous activities such as the paving of roadways and parking lots and the painting of commercial/residential structures. Earthmoving activities could result in substantial fugitive dust (PM<sub>10</sub>) emissions, and would be likely to generate localized PM<sub>10</sub> concentrations in excess of State and federal standards. A major portion of the PM<sub>10</sub> would settle on or immediately adjacent to the construction site, while a small fraction would contribute to regional ambient particulate concentrations.

Exhaust emissions would be generated by construction equipment operations and construction employee vehicle trips. These emissions would include CO, ROG, NO<sub>x</sub>, SO<sub>2</sub> and particulates. Painting and paving of roadway would release primarily ROG into the atmosphere.

General Plan policies related to construction emission control are designed to reduce construction-related impacts. Despite implementation of these policies, construction activities would generate unavoidable, temporary increases in the non-attainment pollutants and their precursors on air quality (i.e. PM<sub>10</sub>, NO<sub>x</sub>, and ROG). **This would be a significant cumulative impact of construction.**

#### Operational Emissions

Background CO concentrations in the Roseville area are low and future roadside CO concentrations are expected to decrease from existing roadside CO concentrations despite anticipated increases in traffic volumes due to improved fuel combustion efficiency. With cumulative development, high CO concentrations could occur at intersections or along roadways where the predicted LOS is E or lower. Despite low background CO concentrations, increased traffic generated by the Proposed Project could lead to violations of ambient CO standards because Roseville is within a federally designated CO non-attainment area. **Cumulative CO levels would be a potentially significant and unavoidable cumulative impact.**

The Proposed Project would contribute to cumulative emissions of ozone precursors and PM<sub>10</sub> from automobiles, and commercial and industrial uses. The General Plan's Air Quality Element and the City's transportation control measures ordinance contain all feasible ozone precursor mitigation measures identified in the Placer County AQAP. **While these measures would help the region in its attempt to control pollutant emissions associated with growth, significant cumulative impacts are expected to occur.**

Cumulative development within the Roseville area would include development in the vicinity of agricultural operations, landfill activities, and wastewater treatment, potentially exposing the public and local residents to associated odors. **However, due to the distance between odor sources and sensitive development, odor is not anticipated to be a significant cumulative impact.**

Existing and proposed development in the Roseville area would include industrial uses which would be stationary sources for toxic air contaminants. **Stringent permitting requirements and federal, State and local regulations guide the development and operation of industrial facilities; therefore, this is considered a less-than-significant cumulative impact.**

## Noise

The cumulative noise context is based on the traffic modeling described in section 4.9, Transportation and Circulation.

### Construction

Noise impacts would result from the operation of construction equipment and from noise generated by vehicular traffic traveling to and from the construction site. The magnitude of the impact would depend on the type of construction activity, the noise level associated with each piece of construction equipment, the duration of construction activities, the presence or absence of noise barriers, and the distance between the source of the noise and receptors. Properties located adjacent to construction sites would be affected temporarily; therefore, short-term construction noise impacts are anticipated with cumulative development. While compliance with the City Noise Ordinance, which limits construction to daytime hours, would reduce noise impacts, there may be short periods when noise levels would be exceeded. **Therefore, construction noise is considered a significant and unavoidable impact.**

### Stationary Sources

Existing and planned industrial uses and public facilities would increase noise levels in the Roseville area. These uses include the development of light industrial areas, electrical substations, wastewater pump stations, and the proposed Bill Graham Presents amphitheater. Most of the non-transportation noise sources are unlikely to generate enough sound to be cumulatively significant. **However, because the exact nature of light industrial and other uses in the North Roseville area is unknown and much of it will be near residential areas, this is considered a significant cumulative impact.**



## Traffic

Traffic noise impacts would occur at noise-sensitive land uses where traffic generated noise levels exceed 60 dBA  $L_{dn}$ . Peak P.M. traffic data was used in conjunction with Federal Highway Administration (FHWA) Model calculations to develop  $L_{eq}$  contours for 25 existing and planned highways and major roadways in the City of Roseville. Calculations indicate that noise levels of 61 to 71 dBA can be expected within 50 feet of the roadway centerline.

In many locations in the City of Roseville current traffic volumes generate sound levels in excess of 60 dBA in noise-sensitive areas. Cumulative development would likely increase the noise levels in areas currently developed. The General Plan contains policies aimed at minimizing noise impacts on existing land uses and precludes future development in noise-impacted areas. In many locations where roadway noise conflicts exist, traffic noise can be reduced. **In other currently developed areas where existing noise levels exceed City standards, incremental traffic noise increases generated by cumulative development would be significant.**

## **Public Services and Utilities**

The cumulative context for public services and utilities is development assumed in the Roseville General Plan for the Year 2010, since the City would provide the public services and utilities for cumulative development, including the NRSP.

## Water

### *Water Supply*

Average cumulative water demand by buildout is projected to be approximately 42.6 mgd. The Proposed Project would increase cumulative demand to approximately 43.1 mgd.

The City has its own water entitlements; however, the sources of Roseville's water (e.g., Folsom Lake) are shared with other communities and cumulative water demands of related projects would be substantial. General Plan policies require the provision of adequate supplies, as well as the identification of new supplies. The implementation of these policies would ensure that adequate supplies are available to serve specific new development projects in the City prior to their approval. However, other important factors affect water supply independently of policies, such as drought conditions and demands from other entitled water users. **Therefore, the implementation of the Proposed Project, in conjunction with other regional development, is considered a potentially significant and unavoidable cumulative impact on water supplies.**

### *Water Treatment Capacity*

The Proposed Project would, in conjunction with other development through the year 2010, result in a substantial increase in demand for water treatment. The City's treatment plant capacity is currently 48 mgd. It is estimated that by 2010, treatment capacity will need to be expanded to about 72 mgd without development of the Proposed Project and other future development. With

the Proposed Project and other cumulative development, the required maximum water treatment capacity would be about 61.12 mgd. When the demand for water treatment exceeds 90 percent of the water treatment plant capacity, the City Council will evaluate all feasible water treatment options, the maximum use of reclaimed water, and water conservation measures, prior to a consideration of restricting additional water service connections. **If this mitigation is carried through to future development, significant cumulative impacts area not expected to occur to water treatment capacity.**

#### *Water Distribution and Conveyance*

The Proposed Project would, in conjunction with other development, result in the need for expansion of the City's water distribution and conveyance system. Numerous pipes would require expansion to ensure that adequate pressure, fire flow, and potable water are available to serve the City's residences and business. Presently, the City is entitled to receive 55.3 mgd of water from the USBR and PCWA, but due to limitations in the conveyance system only 42 mgd is available. To assure adequate water is available in the future, the City is in the process of expanding conveyance capacity to 96 mgd, which is anticipated to be operational by the Year 2000. This increase in water supply would meet the demand assumed for buildout of the General Plan. The City has determined that planning for expanded pipelines should begin when flow velocities exceed five feet per second. Future development would be required to participate in the Environmental Utilities Department CIP and cost sharing agreements to offset the cost of the required improvements. The City should restrict future development when development would result in velocities of seven feet per second or greater. The restrictions should remain in place until such time as developer fees and cost sharing agreements provide adequate funds to cover capital improvements costs for expansion the pipelines. **If this mitigation is carried through to future development, significant cumulative impacts on water distribution are not expected to occur.**

#### *Groundwater*

Future development within the City may be required to participate in the development of additional groundwater wells for emergency backup of the City's potable water supply and reclaimed water system.

The City does not anticipate that emergency backup wells would be operated for an extended period of time, rather, its primary purpose is for reliable water main looping. If, however, the City is required to operate these wells on an extended basis, there could be the potential for a significant cumulative impact on groundwater. **However, future development would have a less-than-significant cumulative impact on groundwater.**



## Wastewater

### *Wastewater Treatment*

The current capacity of the City's wastewater treatment plant is about 18 mgd. In 2010, it is estimated that the City will require a treatment capacity of 45.3 mgd. The development of the Proposed Project and other cumulative development would increase this to 47.04 mgd. The City, in conjunction with other incorporated and unincorporated areas, is in the process of developing a Regional Wastewater Master Plan that would meet the wastewater demands through the year 2015. The City of Roseville certified the EIR for the project in late November 1996, but has not yet approved the project. Approval of the project is pending additional public hearings which will take place in the next two months. It is anticipated that the project will go before the City Council in late January for final approval. **With expansion of the wastewater treatment plant, cumulative demand would be a less-than-significant impact.**

### *Reclaimed Water*

The California Department of Fish and Game (CDFG) currently limits the discharge of treated water into Dry Creek during dry weather to a maximum flow of 18 mgd. The City is participating in the development of a Regional Wastewater Master Plan. This Plan is considering the construction of a new wastewater treatment plant in the Pleasant Grove sewershed. The City should require future development to participate in developer fees and Environmental Utilities Department CIP for extension of the City's reclaimed water distribution system to prevent the city from exceeding the CDFG 18 mgd limit on dry weather discharge of treated water into Dry Creek. **If this mitigation measure is carried forward to future development, significant cumulative impacts are not expected to occur to reclaimed water distribution.**

## Electricity

The Proposed Project, along with other potential development, is expected to increase demand for electricity. The City negotiates for additional electrical power on an as-needed basis appropriate for the City's electrical demands. Suppliers include PG&E, the Western Power Area Administration (WAPA), and the Northern California Power Agency (NCPA), a California joint powers agency comprised of power suppliers and users. The City is a member of the NCPA.

**If the City's strategy to acquire new sources of energy on an as-needed basis, negotiating on an ongoing basis, as appropriate, and assuming energy conservation, the cumulative impact on electrical services would be less than significant. However, if the City could not obtain sufficient reliable electrical power, or would be required to purchase power at non-optimal rates to meet increased demand, the impact on electrical service would be considered significant and unavoidable.**



### Natural Gas

The Proposed Project, along with future development, is expected to increase demand for natural gas. PG&E has indicated that supplying natural gas to future development is not of concern because adequate supplies exist. Distribution facilities would be constructed as needed to serve future development. **As a result, significant cumulative impacts relating to natural gas are not expected to occur.**

### Solid Waste

The population projected in 2010 ranges from approximately 110,000 to 120,000. If the current per capita generation factor of 1.54 tons per year of solid waste remains the same, then between 169,400 and 184,800 tons per year of solid waste would be generated within the City. The Proposed Project would add approximately 15,792 tons annually to this amount. While some of the additional solid waste may be diverted through the source reduction, recycling, and reuse, at least half will need to be landfilled.

**Implementation of policies and implementation measures in the General Plan, including enforcement of source reduction programs, facility monitoring to ensure that a minimum ten-year reserve capacity is maintained, would reduce Roseville's consumption of the landfill's capacity so that cumulative solid waste impacts would be less than significant.**

### Police

Police services are provided based on established service standards and goals reflected in the General Plan. The Proposed Project would contribute to demand for police services. The expansion of police services is demand-responsive and with the implementation of existing policies and implementation measures, these facilities would continue to be adequately funded and provided based on evolving service goals. **Therefore, the cumulative impact on police services would be less than significant.**

### Fire

Similar to police services, fire services are provided based on established service standards and goals. Cumulative development with the City would be subject to these standards. **Given current policies and implementation measures, the cumulative impact on fire services would be considered less than significant.**

### Schools

The development of the Proposed Project, in conjunction with other planned residential development in the City of Roseville, would increase the demand for school services in the Roseville Joint Union High School District, the Roseville Elementary School District, and the Dry Creek Joint Union Elementary School District. New residential development within the City of Roseville would be required to pay school impact fees to the school districts to offset the capital

costs of constructing new schools. In addition, City of Roseville General Plan includes policies that would ensure the provision of adequate school services prior to the approval of new development. **With the payment of the fees and the implementation of the General Plan policies, a significant cumulative impact on school services would not occur.**

#### Cable Television and Telephone

Cumulative development would increase the demand for cable television and telephone. Services would be provided by purveyors who would be willing to meet demand. **Therefore, cumulative impacts are not expected to occur.**

#### Libraries

The provision of library services in the City is based on a service standard of one branch library per 20,000 residents. Cumulative development would contribute sufficient numbers of new residents, who would require additional library facilities. While General Plan policies identify standards of service, construction of libraries usually follows development. **With cumulative development, short-term significant impacts can be expected to occur until library facilities are constructed. No long-term cumulative impacts are expected to occur.**

#### Parks and Recreation

The General Plan requires a minimum of nine acres of dedicated active-use (traditional) park land per 1,000 residents to eliminate anticipated impacts on parks and recreation facilities. The General Plan requires parks construction to be phased so as to be available as adjacent residential uses are developed. **Because existing General Plan policies require new parks and recreation facilities with new development, significant cumulative impacts are not expected to occur.**

### **5.3 GROWTH-INDUCING IMPACTS**

To comply with CEQA, a Draft EIR must discuss the ways in which the Proposed Project will affect economic and commercial growth in the vicinity of the project and how that growth will, in turn, affect the surrounding environment [CEQA Guidelines Section 15126(g)]. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth is considered a significant impact only if it directly (or indirectly) affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth, in some other way, significantly affects the environment.

The North Roseville Specific Plan would directly affect growth in the Roseville area by allowing for the construction of 5,098 dwelling units which would house approximately 12,533 new residents in an area previously zoned urban reserve and light industrial. This represents a different and higher-density use than was assumed in the City's General Plan. The Proposed Project would generate 1,395 additional jobs. Many of the jobs would be filled by residents, though some would be filled by non-residents. This would not result in a jobs/housing imbalance, because the

employee-generated demand for housing could be accommodated by the existing and planned housing supply. Further, the Proposed Project would result in fewer jobs than the light industrial designation.

Implementation of the proposed NRSP would require expansion of the existing infrastructure for water supply, treatment and collection, utilities and roadways. Expansion of existing infrastructure would remove obstacles to growth in the area. The following is a list of infrastructure improvements associated directly or indirectly with implementation of the NRSP.

- Construction of 16-inch water pipelines in Pleasant Grove Boulevard, Baseline Road, and Woodcreek Oaks Boulevard;
- Construction of a parallel 66-inch raw water pipeline from the Folsom Dam pumping facilities to the water treatment plant;
- Construction or relocation of a lift station in Neighborhood C (Walaire 160) and sewer force mains in the Blue Oaks Boulevard extension, and Woodcreek Oaks Boulevard;
- Construction of reclaimed water lines along Woodcreek Oaks Boulevard and Pleasant Grove Boulevard, two pump stations and associated pipelines;
- Dedication of new well sites;
- Dedication of a new Fire Station in Neighborhood D (Woodcreek West property) to serve surrounding areas;
- Dedication of a site in Neighborhood A (Diamond Creek) for an electrical substation to serve the Plan Area;
- Reconstruction of a portion of Fiddymment Road; and
- Additional lanes on local roadways, including Blue Oaks Boulevard and Foothills Boulevard, and the extension of Blue Oaks Boulevard, Woodcreek Oaks Boulevard and Junction Boulevard to serve the Plan Area.

In one respect, adoption of the NRSP could increase pressure to develop adjacent areas within and around the City of Roseville, since it would absorb one of the last available urban reserves left in the western portion of Roseville. Conversely, by providing additional residential capacity within the City through rezoning of light industrial and urban reserve to residential, the Proposed Project would capture housing demand that otherwise could spur additional development outside of the City.



## 5.4 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

The potential environmental impacts that would result from implementation of the Proposed Project are summarized in Table 2-1. In most cases, impacts that have been identified would be less than significant after application of relevant General Plan policies. In some instances, incorporation of the mitigation measures described in Table 2-1 would reduce the impacts to levels that are less than significant. Those impacts which cannot be feasibly mitigated to a less-than-significant level would remain as significant unavoidable adverse impacts. These are listed below:

- |                  |                                                                                                                |
|------------------|----------------------------------------------------------------------------------------------------------------|
| 4.5-1(A and B):  | Loss of oak trees of greater than 6" dbh (short-term).                                                         |
| 4.5-3(A and B):  | Loss of vernal pools, seasonal wetlands and other jurisdictional waters of the U.S. (potentially significant). |
| 4.5-4(A and B):  | Loss of wildlife habitat.                                                                                      |
| 4.5-7(A and B):  | Loss of special-status plant species occurring in vernal pools (potentially significant).                      |
| 4.5-8(A and B):  | Loss of federal threatened vernal pool fairy shrimp (potentially significant).                                 |
| 4.7-1(A and B):  | Conversion of undeveloped landscape to urban development.                                                      |
| 4.10-2(A and B): | Project-related operational air pollutant emissions (ROG, NO <sub>x</sub> , PM <sub>10</sub> ).                |
| 4.10-5(A and B): | Inconsistency with applicable Air Quality Attainment Plans.                                                    |
| 4.11-1(A and B): | Temporary noise increases due to construction.                                                                 |

### **Cumulative Significant and Unavoidable Impacts**

- Increased flood flows, which could increase downstream flooding.
- Water quality degradation.
- Loss of biological resources.
- Alteration of visual character of undeveloped areas.
- Increased traffic volumes.
- Increased air pollutant emissions, including CO, PM<sub>10</sub>, NO<sub>x</sub> and ROG.
- Increased traffic and stationary source noise.
- Increased demand for domestic water.
- Increased demand for electrical service.

### ENDNOTES

1. Aqua Resources, Inc., *City of Roseville Northwest Specific Plan Drainage Plan Summary Report*, May 1990.





---

---

## ***6.0 PROJECT ALTERNATIVES***

---

---



---

---

## ***6.0 PROJECT ALTERNATIVES***

---

---

### **6.1 INTRODUCTION**

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126(d) of the CEQA Guidelines, is to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Further, the Guidelines state that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." An EIR must describe a range of reasonable alternatives to the Proposed Project (or to its location) that could feasibly attain most of the basic objectives of the project. The feasibility of an alternative may be determined based on a variety of factors including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (CEQA Guidelines Section 15126(d)(5)(A)).

The choice of alternatives is guided primarily by the need both to reduce or eliminate project impacts and to achieve project objectives. The objectives of the project were used to identify appropriate alternatives. As stated in Chapter 3, Project Description, the Proposed Project objectives are:

- (1) Provide public services to meet the needs of development within the Plan Area.
- (2) Provide a distinct identity, sense of organization and order for the Plan Area.
- (3) Provide a housing supply near the employment centers in the northwest area of the city to enhance the potential for jobs/housing balance and to minimize trip length for employees to and from the employment center.
- (4) Provide a range of housing types and densities that include dwellings affordable to households in a variety of income categories, and provide residential and care facilities for seniors.
- (5) Provide space for retail, commercial, and professional land uses to serve the Plan Area residents and the general public such that residents reduce the need to travel outside of the Plan Area for many routine daily needs.



- (6) Enhance neighborhoods by integrating natural areas through visual and pedestrian links and protect the woodland and creekside environment along Pleasant Grove Creek and its tributaries in open space and parks. Provide direct access to open space through neighborhoods.
- (7) Provide a pedestrian and bicycle path system and access to public transit to encourage residents to minimize auto use for shopping, services and leisure activities.
- (8) Complete the land use and infrastructure planning for the northwestern portion of the city.

The significant and unavoidable impacts that would result from project implementation are:

- Loss of oak trees of greater than 6" dbh (short-term).
- Loss of vernal pools, seasonal wetlands and other jurisdictional wetlands.
- Loss of vernal pool plants and fairy shrimp.
- Loss of wildlife habitat.
- Conversion of undeveloped landscape to urban development.
- Increases in air pollution.
- Inconsistency with the regional Air Quality Attainment Plans.
- Short-term increases in noise due to construction.

## 6.2 ALTERNATIVES CONSIDERED AND ELIMINATED FROM FURTHER ANALYSIS

Because the majority of the most valuable biological and visual resources would be protected in open space under the Proposed Projects, an alternative that had land uses similar to the Proposed Project, but on fewer acres, was not considered. It should be noted, however, that the adoption of Phase I alone, which would have less severe impacts than the Full Project, could be considered less development-intensive than the Full Project.

## 6.3 ALTERNATIVES ANALYZED

This section provides a description of the alternatives to the Proposed Project analyzed in this DEIR and presents specific impacts that differ in significance and/or severity from those associated with the Proposed Project. For the most part, significant impacts of the alternatives can be mitigated by measures identified in Chapter 4, which contains the environmental analysis of the Proposed Project.

The City may adopt an alternative in lieu of the Proposed Project, and this chapter is intended to assist decision-makers in their assessment of appropriate use of the Plan Area. As such, the six alternatives that are analyzed in this EIR provide policy options for Plan Area development. The alternatives are:

- **Alternative 1, No Project/No Development**, which assumes that no development occurs on the project site;

- **Alternative 2, No Project/Existing Zoning Only**, which assumes the existing light industrial designations are developed, but that no development occurs in the Urban Reserve areas;
- **Alternative 3, Existing Zoning and Urban Reserve Development**, which assumes that the existing light industrial designations are retained, and that the urban reserve designations are developed in the Phase I Urban Reserve with the same residential, commercial and public uses identified for the Proposed Project (Phase II would not be developed);
- **Alternative 4, Lower-Density**, which provides fewer residential units, but on the same amount of acreage as the Proposed Project;
- **Alternative 5, Off Site**, which assumes that the same type and level of development proposed in the Full Project occurs in the East Area; and
- **Alternative 6, Junction Boulevard Realignment**, which assumes that Junction Boulevard is extended in a straight line to form a "T" intersection with Fiddymment Road.

A summary of the land use assumptions for each alternative by property is provided in Table 6-1. Each of the alternatives is described in more detail and analyzed, below. For each subject area, Table 6-2 indicates whether the impacts of the alternatives are more or less severe than those of the Proposed Project. A discussion of the "environmentally superior alternative" appears at the end of this chapter.

### **6.3.1 Alternative 1: No Project/No Development Alternative**

CEQA requires the evaluation of the comparative impacts of the "No Project" alternative (CEQA Guidelines Section 15126(d)(4)). The No Project Alternative can be defined either as "no development" on the project site, or as "no action" taken on the Proposed Project. The "no development" alternative describes an alternative in which the Plan Area would likely continue to be used primarily for grazing of cattle. The site-specific impacts of the "no development" alternative are best described by the conditions presented in the setting sections of Chapter 4 of this DEIR. If the No Project alternative is defined as the "no action" alternative, the conditions that would be assumed in the future would be based on reasonable expectations about what would occur under current plans and consistent with available infrastructure and community services. For this EIR, the "no development" alternative is evaluated as Alternative 1, No Project/No Development, and the "no action" alternative appears as Alternative 2, No Project/Existing Zoning Only.

#### **Land Use**

Significant land use impacts were not identified for the Proposed Project. Nonetheless, the less-than-significant impacts that were identified would not occur under the No Project/No Development Alternative. Because the Plan Area would remain undeveloped, conversion of agricultural land would not occur, and incompatibilities between residential and other uses would

TABLE 6-1

## SUMMARY OF ALTERNATIVE LAND USE ASSUMPTIONS BY PROPERTY

| Property within Plan Area | Alternative 1<br>No Project/No Development | Alternative 2<br>No Project/Existing Zoning Only <sup>1</sup> | Alternative 3<br>Existing Zoning Plus Phase 1 Urban Reserve <sup>1</sup> | Alternative 4<br>Lower Density <sup>2</sup> | Alternative 5<br>Off Site <sup>2</sup> | Alternative 6<br>Junction Realignment |
|---------------------------|--------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------|----------------------------------------|---------------------------------------|
| Diamond Creek             | No development                             | 1.3M sf of Light Industrial                                   | 1.3M sf of Light Industrial                                              | Proposed Project (less 226 du)              | 1.3 M sf of Light Industrial           | Proposed Project                      |
| Eskaton                   |                                            |                                                               |                                                                          | Proposed Project                            |                                        |                                       |
| Mourier 140               | No development                             | 263k sf of Light Industrial                                   | 263k sf of Light Industrial                                              | Proposed Project (less 127 du)              | 263k sf of Light Industrial            |                                       |
| Woodcreek North           | Urban Reserve                              | Urban Reserve                                                 | Proposed Project (see Table 6-3)                                         | Proposed Project (less 146 du)              | Urban Reserve                          |                                       |
| Walaire 160               | Urban Reserve                              | Urban Reserve                                                 | Urban Reserve                                                            | Proposed Project                            | Urban Reserve                          |                                       |
| Woodcreek West            | Urban Reserve                              | Urban Reserve                                                 | Urban Reserve                                                            | Proposed Project                            | Urban Reserve                          |                                       |

## NOTES:

<sup>1</sup> = Development in Neighborhoods A and B only, so compared to Phase I of the Proposed Project.<sup>2</sup> = Development in the entire Plan Area, so compared to the Full Project.

M = million

k = thousand

sf = square feet

du = dwelling unit

SOURCE: DKS Associates, EIP Associates, 1997.



TABLE 6-2

## COMPARISON OF ALTERNATIVES TO PROPOSED PROJECT

| Resource                              | Phase I | Proposed Project | Alternative 1<br>No Project/<br>No Development | Alternative 2<br>No Project/Existing<br>Zoning Only <sup>1</sup> | Alternative 3<br>Existing Zoning Plus<br>Phase 1 Urban<br>Reserve <sup>1</sup> | Alternative 4<br>Lower<br>Density <sup>2</sup> | Alternative 5<br>Off Site <sup>2</sup> |
|---------------------------------------|---------|------------------|------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------|
| Land Use                              |         | LS               | LS-                                            | LS-                                                              | LS-                                                                            | LS                                             | LS                                     |
| Population, Employment and Housing    |         | LS               | LS-                                            | SU+                                                              | SU+                                                                            | LS+                                            | LS                                     |
| Soils, Geology, and Seismicity        |         | LS/MM            | LS/MM-                                         | LS-                                                              | LS/MM-                                                                         | LS/MM-                                         | LS/MM+                                 |
| Hydrology and Water Quality           |         | LS/MM            | LS-                                            | LS-                                                              | LS/MM-                                                                         | LS/MM                                          | LS/MM                                  |
| Biological Resources                  |         | SU               | LS-                                            | SU-                                                              | SU-                                                                            | SU                                             | SU+                                    |
| Cultural Resources                    |         | LS/MM            | LS-                                            | LS/MM-                                                           | LS/MM-                                                                         | LS/MM                                          | LS/MM                                  |
| Aesthetics and Visual Resources       |         | SU               | LS-                                            | SU-                                                              | SU-                                                                            | SU                                             | SU+                                    |
| Hazardous Materials and Public Safety |         | LS/MM            | LS-                                            | LS/MM+                                                           | LS/MM+                                                                         | LS/MM-                                         | LS/MM-                                 |
| Transportation and Circulation        |         | LS/MM            | LS-                                            | LS/MM-                                                           | LS/MM-                                                                         | LS/MM-                                         | SU+                                    |
| Air Quality                           |         | SU               | LS-                                            | SU-                                                              | SU-                                                                            | SU-                                            | SU                                     |
| Noise                                 |         | SU               | LS-                                            | SU-                                                              | SU-                                                                            | SU                                             | SU                                     |
| Public Services and Utilities         |         | LS/MM            | LS-                                            | LS/MM-                                                           | LS/MM-                                                                         | LS/MM-                                         | LS/MM                                  |

## NOTES:

<sup>1</sup> = Development in Neighborhoods A and B only, so compared to Phase I of the Proposed Project.<sup>2</sup> = Development in the entire Plan Area, so compared to the Full Project.

- = Alternative impacts less severe than the Proposed Project.

+ = Alternative impacts more severe than the Proposed Project.

LS = All impacts would be less than significant, no mitigation required.

LS/MM = All impacts would be less than significant after mitigation.

SU = One or more impacts would be significant and unavoidable, even after mitigation.

S = Proposed Project and the Alternative impacts identical or very similar.

<sup>1</sup> = Alternative 6 is not included, because it affects transportation only.

SOURCE: EIP Associates, 1997.

not be created. In addition, the portion of Fiddymment Road that is adjacent to the Urban Reserve would not require annexation.

Based on the above discussion, the impacts identified under the No Project/No Development Alternative would be less severe than under the Proposed Project.

### **Population, Employment and Housing**

Residual impacts on population, housing and employment for the Proposed Project were less than significant.

The No Project/No Development Alternative would not provide any housing, so there would not be an increase in population. Similarly, employment levels would not be affected by this alternative. Therefore, there would not be any impacts on population, employment or housing.

Based on above, the impacts identified under the No Project/No Development Alternative would be less severe than under the Proposed Project.

It should be noted that the Proposed Project provides for more housing units than required by the employees that would be working within the Plan Area. The net increase in housing would aid the City in meeting its jobs/housing balance policy by providing homes in proximity to major employment centers (e.g., Hewlett-Packard, NEC). The No Project/No Development Alternative would not provide this benefit.

### **Geology, Soils and Seismicity**

Under the Proposed Project, all impacts related to geology, soils and seismicity were less than significant, or could be mitigated to less-than-significant levels with application of City standards and geotechnical recommendations resulting from site-specific evaluations.

Because no development would occur under the No Project/No Development Alternative, none of the impacts identified for the Proposed Project would occur. People would not be exposed to seismic risks. The potential for erosion, slope instability, and problems associated with soils constraints would not occur without development. Mineral resources, if any are present, would remain available for future use.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Hydrology and Water Quality**

Under the Proposed Project, all impacts on flooding, groundwater recharge, and water quality would be less than significant, or could be mitigated to less-than-significant levels with implementation of State and City requirements and additional mitigation measures identified in Section 4.4.

Under the No Project/No Development Alternative, there would not be any grading, so erosion-related degradation of water quality would not occur. New impervious surface would not be created, so impacts on flooding and water quality due to increased stormwater runoff would not take place, and groundwater recharge would not be affected.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Biological Resources**

The Proposed Project would result in significant and unavoidable impacts on biological resources due to the loss of wildlife habitat, oak trees (in the short term), vernal pools, and vernal pool plants and fairy shrimp. Oak woodlands, disturbance of wildlife and nesting habitat during construction, and loss of the valley elderberry longhorn beetle habitat would be less than significant after mitigation.

Under the No Project/No Development Alternative, loss of biological resources would not occur, because there would be no development in the Plan Area.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Cultural Resources**

The Plan Area contains two recorded cultural resource sites, which could be damaged or destroyed if developed. This impact would be less than significant with implementation of Mitigation Measures 4.6-2(a) and (b), which require that the sites be subject to archaeological testing and, if found to be significant, preserved or recorded. Unknown subsurface resources could also be vulnerable to damage or destruction during construction, but this impact would be made less than significant by Mitigation Measure 4.6-1, which requires that all work cease if a historic or prehistoric deposit is uncovered, and that an archaeologist be consulted prior to restarting work. With these mitigation measures, the cultural resource impacts of the Proposed Project would be reduced to less-than-significant levels.

Under the No Project/No Development Alternative, known and unknown cultural resources would remain undisturbed, because no construction would occur.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Aesthetics and Visual Resources**

The Proposed Project would convert the visual character of the Plan Area from an undeveloped environment to an urban landscape. This impact would be significant and unavoidable. The Proposed Project would also decrease visual quality by removing riparian vegetation, but this would be a less-than-significant impact, because a substantial majority of riparian vegetation in



the Plan Area would be retained in open space and parks. The Proposed Project would introduce night-time lighting into the Plan Area and the potential exists for visual incompatibility between the residential uses of the Proposed Project and adjacent light industrial uses. These impacts would be reduced to less-than-significant levels with implementation of Community Design Guidelines and Specific Plan design requirements, including the use of buffers and "cut-off" light fixtures. With the exception of conversion of the undeveloped landscape to an urban character, the visual impacts of the Proposed Project would be less than significant, or could be reduced to less-than-significant levels with implementation of City and NRSP guidelines.

Under the No Project/No Development Alternative, none of the visual impacts described above would occur. The Plan Area would retain its undeveloped character, and night-lighting would not be introduced. There would not be any visual incompatibilities between the Plan Area and surrounding light industrial uses.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Hazardous Materials and Public Safety**

All impacts related to hazards and public safety would be less than significant under the Proposed Project, or could be mitigated to less-than-significant levels by mitigation measures identified in Section 4.8.

Nonetheless, none of the impacts associated with the Proposed Project would occur under the No Project/No Development Alternative, as there would be no activities requiring the use of hazardous materials, and no resident population that could be exposed to onsite contamination or electromagnetic fields. The risk of fire would be unchanged as well.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Transportation and Circulation**

Under the Full Project, increases in traffic would result in unacceptable service levels on Blue Oaks Boulevard between Foothills Boulevard and Woodcreek Oaks Boulevard. In addition, the intersection of Foothills Boulevard and Blue Oaks Boulevard would operate at an unacceptable service level. These significant impacts would be reduced to less-than-significant levels by adding appropriate roadway improvements to the City's CIP (per Mitigation Measure 4.9-2).

All other traffic and circulation impacts, including increased traffic on roadways in Phase I, increased bicycle trips, and increased roadway volumes on Placer County, Sutter County and City of Rocklin roadways, would be less than significant under the Proposed Project.

Under the No Project/No Development Alternative, there would not be any increases in traffic, so there would not be any impact on City or other roadways. Similarly, there would not be any increase in demand for transit services or bicycle or pedestrian facilities. For these reasons, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Air Quality**

Emissions of regional air emissions, due to project-related traffic, and inconsistencies with the regional Attainment Plans would be significant and unavoidable impacts under the Proposed Project. Short-term air emissions due to site grading and construction, increases in carbon monoxide at intersections, and exposure to odors, criteria air pollutants and toxic air contaminants would be less-than-significant impacts under the Proposed Project.

There would be no impact on air quality under the No Project/No Development Alternative, because no construction, traffic, or other activities that create air pollutants would occur.

Based on the above discussion, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Noise**

Under the Proposed Project, construction noise could be significant and unavoidable for short periods at adjacent residences. Increases in noise due to construction, traffic, and stationary sources would be less than significant after mitigation.

There would be no noise impacts under the No Project/No Development Alternative, as no construction, traffic or other noise-generating activities would occur. Therefore, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.

### **Public Services and Utilities**

The Proposed Project would create an increased demand for public services and utilities, including water supply, wastewater treatment and conveyance, solid waste disposal, natural gas, electricity, police protection, fire protection, schools, libraries, and parks. Demand for each of these services and utilities would be less than significant, or could be mitigated to less-than-significant levels with measures identified in Chapter 4.12.

The No Project/No Development Alternative would not increase demand for any public services or utilities, because there would be no increase in population or employment. Therefore, impacts under the No Project/No Development Alternative would be less severe than impacts under the Proposed Project.



## CEQA Considerations

The No Project/No Development Alternative would not induce growth, create significant irreversible effects or result in cumulative impacts.

### Summary of Significant and Unavoidable Impacts

There would not be any significant and unavoidable impacts under the No Project/No Development Alternative.

#### **6.3.2 Alternative 2: No Project/Existing Zoning Only Alternative**

For analysis of Alternative 2 (No Project/Existing Zoning Only), it was assumed that the Plan Area would be developed according to the existing land use designations (see Figure 6-1). Those areas designated light industrial (Diamond Creek, Eskaton and Mourier 140) would be developed with light industrial uses, such as Hewlett-Packard, NEC, and similar facilities found in North Roseville. The City's current 2010 market projections for light industrial development indicate that 1.57 million square feet (msf) would be developed in the North Industrial Plan Area (excluding the Hewlett-Packard Master Plan). Alternative 2 assumes that the entire 1.57 msf would occur on the Diamond Creek, Eskaton and Mourier 140 properties. At the floor area ratio (FAR) the City currently assumes for light industrial development (0.20), 180 acres would be required for the 1.57 msf of light industrial development. If a higher FAR was assumed, fewer acres would be needed for this level of development. For example, an FAR of 0.30 would require only 120 acres. The remaining properties, Walaire 160, Woodcreek North and Woodcreek West, are designated urban reserve and would not be subject to any development under this alternative.

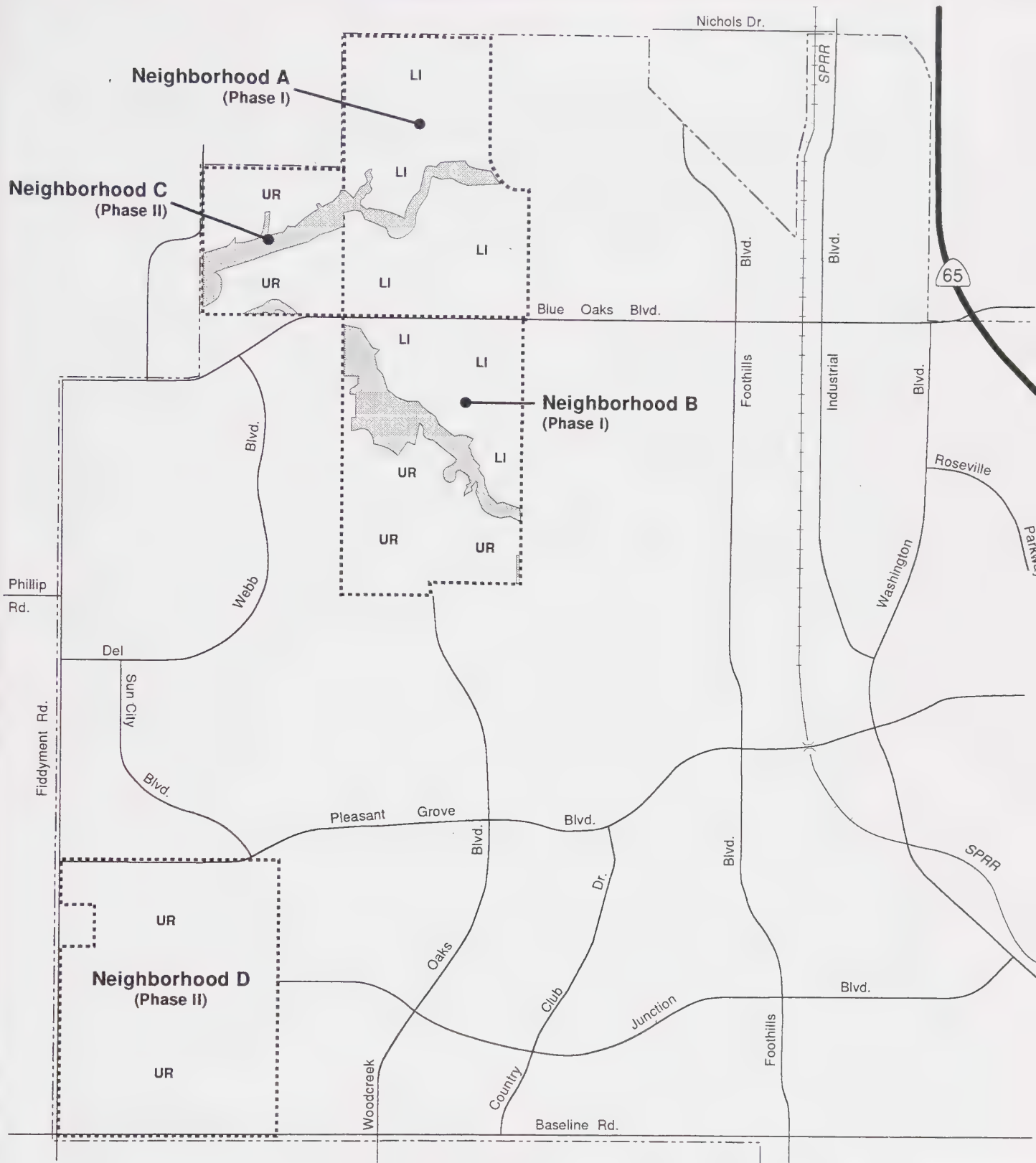
Under the Existing Zoning Only Alternative, the improvements and facilities described in the NRSP would not be developed, except as necessary to serve light industrial development. Roadways would not be extended through the non-industrial areas, and schools, parks and other community facilities would not be built. Water, sewer and utility lines would be extended to and through the light industrial area as needed for specific project development. Similar to the analysis of the Proposed Project, this evaluation of the Existing Zoning Only Alternative assumes compliance with federal and State laws, the City's General Plan Policies, and City Ordinances, Improvement Standards and Design Standards.

Because the Existing Zoning Only Alternative would occur only in the Phase I portion of the Plan Area, its impacts are compared to Phase I of the Proposed Project for each area of analysis.

### Land Use

Alternative 2 would result in the industrial development of 180 acres of land designated for light industrial uses. In contrast, the Proposed Project would require a change in the land use designations of the Plan Area from Light Industrial (approximately 503 acres) and Urban Reserve (approximately 233 acres). The land use conversion was considered less than significant under the Proposed Project, while no conversion would occur under Alternative 2.





- Neighborhood Boundary Within Specific Plan Area
- Roseville City Limits
- Open Space
- Existing and Approved Roads

LI=Light Industrial  
UR=Urban Reserve

**Figure 6-1**

**Light Industrial  
Only Alternative**

0 1/4 1/2  
Scale In Miles



96063  
Base





Approximately 180 acres of grazing land would be lost if light industrial uses were developed under the Existing Zoning Only Alternative. As with the loss of approximately 655 acres of grazing land under Phase I of the Proposed Project, this is considered a less-than-significant impact because of the relatively low value and non-irrigated status of this land. Nonetheless, the loss of agricultural land would be less severe under Alternative 2 than under the Proposed Project.

Because there are no residential uses anticipated under the Existing Zoning Only Alternative, conflicts (such as residents' complaints about odors or noise) with adjacent and nearby agricultural uses, the landfill, and the pumping station would not occur, as compared to the less-than-significant impacts associated with the Proposed Project. In addition, there would be no conflicts with the Sunset Industrial Area, to the north of the Plan Area, because there would not be any residential development in the Plan Area adjacent to the anticipated light industrial uses or the proposed Amphitheater in the Sunset Industrial Plan. A small portion of the Mourier 140 property would be adjacent to the Del Webb Specific Plan area to the east, and conflicts could occur between light industrial uses and the Del Webb residential areas. However, implementation of the North Area Design Guidelines and other City policies and standards would ensure that any incompatibilities would be less than significant. The area of potential conflict (the easternmost portion of the Mourier 140 property) would be much smaller under Alternative 2 than under the Proposed Project (the entire eastern boundaries of the Diamond Creek, Mourier 140 and Woodcreek North properties).

As discussed above, land use impacts would be less severe under Alternative 2 than under the Proposed Project.

### **Population, Employment and Housing**

Under the Existing Zoning Only Alternative, there would be no residential development in the Plan Area; therefore, there would not be an increase in population.

Potential employment levels would be substantially higher than under the Proposed Project, approximately 2,617 employees under Alternative 2, as opposed to approximately 1,215 under Phase I of the Proposed Project. The employees generated by Alternative 2 would create a demand for approximately 1,953 homes. In order to be consistent with the City's jobs/housing balance policy (Resolution 83-118), approximately 1,562 homes for these workers would be needed within eight miles of their worksite, and approximately 1,172 would be needed within six miles of their worksite. No residential development would occur within the Plan Area, so these workers would need to be able to find homes in the surrounding specific plan developments and other nearby residential areas. Given anticipated growth in infill and other areas, including areas outside of the City, the City might be able to meet this policy. However, the City cannot guarantee that residential development would occur in other jurisdictions, and the city itself is projected to exhaust its housing allocations by 2005. Therefore, Alternative 2 could have a significant and unavoidable impact on the City's jobs/housing balance policy.



The Proposed Project would have the beneficial impact of providing new housing; this would not occur under the Existing Zoning Only Alternative. The City's goal for providing affordable housing would not apply to the Light Industrial Only Alternative.

Because the Proposed Project would not have any significant impacts, while Alternative 2 would have a potentially significant and unavoidable impact on the City's jobs/housing balance, population, employment and housing impacts would be more severe under Alternative 2 than under the Proposed Project.

### **Geology, Soils and Seismicity**

Under the Existing Zoning Only Alternative, no residential or commercial development of the Plan Area would occur. However, it is assumed that there would be industrial development in the Diamond Creek, Eskaton and Mourier 140 portions of the Plan Area. Development of these three properties would result in impacts similar to the Proposed Project: development in an area of seismic activity; development in an area of soil constraints; potential slope instability and subsequent erosion; inaccessibility to potential mineral resources located in the Plan Area; and topographic changes due to grading activities. Seismic activity is a concern for both residential and employee populations, as well as property. However, the greatest concern would be for residential development. Because the Existing Zoning Only Alternative would not include any residential uses, it would have a less severe impact related to seismic risks. Soils constraints, slope instability, erosion, loss of mineral resources and topographic changes are related to the extent of construction activity more than the eventual land uses. The Existing Zoning Only Alternative would result in fewer developed acres than the Proposed Project, so impacts related to soils, slopes, erosion and topography would be less severe under Alternative 2.

Because the Existing Zoning Only Alternative would not place residential units in the Plan Area and because it would result in the development of fewer acres than the Proposed Project, geology, soils and seismicity impacts would be less severe under the Alternative 2 than under the Proposed Project.

As with the Proposed Project, impacts occurring under the Existing Zoning Only Alternative would be mitigable to less-than-significant levels with implementation of City standards and site-specific geotechnical recommendations.

Based on the above discussion, impacts under the Existing Zoning Only Alternative would be less severe than impacts under the Proposed Project.

### **Hydrology and Water Quality**

Under the Existing Zoning Only Alternative, onsite impacts associated with flooding would not occur since it is assumed that there would be no industrial development within the flood plain. Impacts associated with increased stormwater runoff, interference with groundwater recharge potential, and decreased water quality would occur, but would be less severe, because industrial development would occur on only 180 acres, compared to approximately 655 acres under the Proposed Project. This level of development was assumed in the planning for the City's regional

detention basin. Any light industrial development in the Plan Area would be required to pay fees toward the construction of this basin, or another regional facility if one is developed. Participation in the construction of a regional detention basin would reduce offsite flooding impacts to a less-than-significant level. Like the Proposed Project, light industrial development would be subject to State and City requirements including BMPs to reduce contaminants in surface runoff, which would ensure that water quality impacts would be less than significant.

The mitigation measures identified for the Proposed Project in Section 4.4 would not be necessary under the Existing Zoning Only Alternative. Further, the Existing Zoning Only Alternative would result in substantially less grading and impervious surface, so erosion and increases in surface runoff would not be as great as under the Proposed Project. For these reasons, the hydrologic and water quality impacts of the Existing Zoning Only alternative would be less severe than those of the Proposed Project.

### **Biological Resources**

Under Alternative 2, the Woodcreek North parcel would not be developed, which would save a large amount of grassland, oak woodlands, wetlands and oak trees that would be developed under the Proposed Project. Specifically, under Phase I of the Proposed Project, development on Woodcreek North would result in the loss of approximately 160 acres of grassland, 1.74 acres of wetlands, and 7.7 acres of oak woodland, as well as the loss of individual trees for road crossings and water and sewer lines. All of these biological resources on Woodcreek North would be retained under the Existing Zoning Only Alternative. By maintaining the existing habitat on Woodcreek North, impacts on wildlife habitat and movement, special-status plant and animal species, and Swainson's hawk and other raptor's foraging and nesting habitat would be less than the Proposed Project. However, the residual significance associated with each of these impacts would remain significant, because industrial development would occur on the Diamond Creek, Eskaton, and Mourier 140 properties within the Plan Area.

Because fewer biological resources would be removed, biological impacts under the Existing Zoning Only Alternative would be less severe than those of the Proposed Project.

### **Cultural Resources**

Development under the Existing Zoning Only Alternative would result in impacts similar to the Proposed Project regarding damaging or destroying undiscovered cultural resources. As with the Proposed Project, this alternative would result in less-than-significant impacts with Mitigation Measure 4.6-1, which requires that construction activities cease if a prehistoric or historic resource is uncovered, and that a qualified archaeologist assess the find. Even with mitigation, the potential for disturbing subsurface cultural resources would be smaller under the Existing Zoning Only Alternative, because only 180 acres would be subject to development.

Impacts on site CA-PLA-429, an archaeological site on the Diamond Creek and Walaire 160 properties, may or may not be developed under the Existing Zoning Only Alternative. Under the Proposed Project, site CA-PLA-429 would be located in open space. As with the Proposed Project, impacts on site CA-PLA-429 would be less than significant with implementation of



Mitigation Measures 4.6-2(a) and (b), which call for archaeological testing of CA-PLA-429 to determine its significance, and, if the site is significant, preservation or recordation.

Site CA-PLA-138, which is located on the Walaire 160 property, would not be affected by the Existing Zoning Only Alternative or Phase I of the Proposed Project.

Because fewer acres would be developed under the Existing Zoning Only Alternative, the potential to disturb undiscovered cultural resources would be less than the Proposed Project. Therefore, the Existing Zoning Only Alternative would have less severe impacts on cultural resources than the Proposed Project.

### **Aesthetics and Visual Quality**

Development under Alternative 2 would convert undeveloped land to a developed urban environment in the Phase I portion of the Plan Area. Like development under the Proposed Project, this would be considered a significant impact, and no mitigation would be available. However, the impact would be less severe under Alternative 2, because fewer areas would be converted. Since there would be no residential development under this alternative, there would be no impact associated with visual incompatibility of light industrial and residential uses as found with the Proposed Project. Artificial light and glare would be associated with industrial uses; however, as with the Proposed Project, this impact would be less than significant with compliance with the North Industrial Area Design Guidelines.

Based on the above discussion, impacts under the Existing Zoning Only Alternative would be less severe than impacts under the Proposed Project.

### **Hazardous Materials**

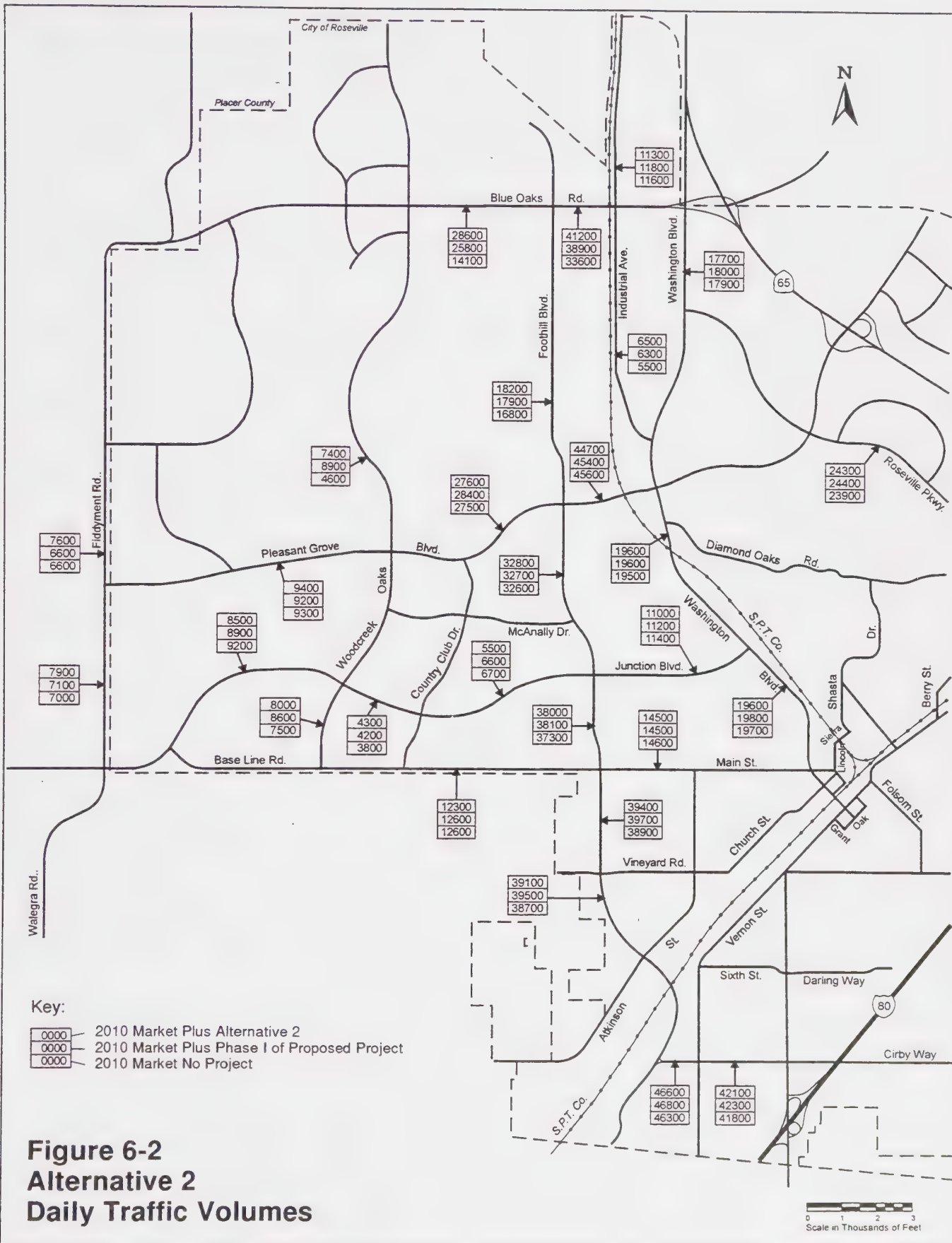
Under Alternative 2, the impacts related to increased risk of hazardous materials accidents or spills due to commercial development would be eliminated. In addition, the increased risk of contamination from improper disposal of household hazardous wastes and potential effects of EMFs on residences would be eliminated because no residential development would occur under this alternative. However, impacts related to increased hazardous materials use and accidental spills, and the demand for emergency response services would increase due to the increased industrial development. Impacts associated with existing or unknown contaminants related to past land uses and the increased risk of fire would also occur. As with the Proposed Project, these impacts could be reduced to a less-than-significant level.

Based on the above discussion, hazardous materials impacts would be more severe than the Proposed Project.

### **Transportation and Circulation**

Daily vehicle trip generation under the Existing Zoning Only Alternative would be approximately 7,600 vehicles at 2010, compared to 33,700 trips under Phase I of the Proposed Project. Projected traffic volumes are shown in Figure 6-2. Under this alternative, the intersection of Foothills







Boulevard and Blue Oaks Boulevard would operate at LOS "D" during the p.m. peak hour. Under 2010 Market conditions and assuming Phase I only of the Proposed Project, the Foothills/Blue Oaks Boulevard intersection would operate at an acceptable level of service. In addition, the intersections of Industrial Avenue and Blue Oaks Boulevard and Woodcreek Oaks Boulevard at Blue Oaks Boulevard would both operate at LOS "D" during the p.m. peak hour. All of these impacts can be mitigated by feasible intersection improvements.

Because there would be no residential, commercial, park or open space uses developed under Alternative 3, demand for transit services and bicycle facilities would be substantially reduced. It is anticipated that there would be minimal demand for these types of facilities with industrial development in the Plan Area.

Based on the above discussion, impacts under the Existing Zoning Only Alternative would be less severe than impacts under the Proposed Project.

### **Air Quality**

Development under the Existing Zoning Only Alternative would result in impacts on air quality in the Roseville area. Short-term emissions of PM<sub>10</sub> and NO<sub>x</sub>, ROG, SO<sub>2</sub> and CO would be generated by construction equipment and associated activities during development of the industrial uses in the north-central and eastern portion of the Plan Area. Emissions generated by Alternative 2 would be of lesser magnitude than that associated with the Proposed Project because development would occur on only 180 acres. However, as with the Proposed Project, this would remain a significant short-term impact.

Impacts related to CO at intersections and increased air pollution due to traffic would be substantially less under this alternative because of the number of vehicle trips would be approximately 77.5 percent lower than under Phase I of the Plan Area. Regional emissions would also be lower, because there would be fewer vehicle trips.

Minor odor impacts on residents in the Plan Area would be eliminated under this alternative because no residential development would occur, so no residents would be exposed.

Because the Existing Zoning Only Alternative would include uses that are assumed under the existing Air Quality Attainment Plan, it would be consistent with the Attainment Plan. By comparison, the Proposed Project would provide for residential development beyond that anticipated in the Attainment Plan, which is considered a significant and unavoidable impact.

Under the Alternative 2, criteria air pollutants and toxic air contaminants would be generated by those uses and activities. Industrial uses would need to obtain permits from the APCD for emissions from stationary sources. While the number and size of stationary sources would be greater under Alternative 2, emissions from these facilities would likely be minimal due to the permit requirements and State and federal regulations. Further, there would not be the associated resident population exposed to light industrial pollutants and contaminants because no residential development would occur under this alternative. A small portion of the Del Webb Specific Plan Area is near the Eskaton and Mourier 140 properties, so some Del Webb residents may be



affected. The potential number of affected residents would be lower than under the Proposed Project. Therefore, the magnitude of the impact would be less than under the Proposed Project.

Because emissions from stationary sources would increase only slightly, while vehicle-related air pollutants would be substantially reduced, the Existing Zoning Only Alternative would result in less severe air quality impacts than the Proposed Project.

## **Noise**

Under the Existing Zoning Only Alternative, the noise impacts within the Phase I Plan Area related to construction noise and non-traffic related noise would be lessened or eliminated since there would be no residences or other sensitive receptors in the Plan Area itself, and because fewer acres would be developed. Short-term construction noise related to industrial development could affect residents of the Del Webb Specific Plan Area. This impact could be significant and unavoidable for short periods of time.

Under the Proposed Project, traffic would not increase enough to create significant impacts at offsite sensitive receptors. The Existing Zoning Only Alternative would produce even fewer traffic trips (approximately 22.5 percent of Phase I of the Proposed Project), so noise levels would be anticipated to be well below significance thresholds.

Based on the above discussion, impacts under the Existing Zoning Only Alternative would be less severe than impacts under the Proposed Project.

## **Public Services and Utilities**

Under the Existing Zoning Only Alternative, there would not be an increase in the residential population. Therefore, there would be less demand for services that are essentially population-driven, including fire protection, law enforcement, parks, libraries or schools. The areas that would be developed would require a new station, as with the Proposed Project, in order to be within an adequate response time for emergency calls to the Fire Department (Mitigation Measure 4.12-2).

Light industrial development does require water and energy, and would generate substantial amounts of wastewater and solid waste. These are discussed below.

### Water

The effect of the Existing Zoning Only Alternative on water supply would be similar to Phase I of the Proposed Project, but the impact would be less severe. Demand for domestic water would be approximately 11 percent lower for the Light Industrial Only Alternative than for the Proposed Project, because the only developed use would be light industrial. The average daily demand of the Existing Zoning Only Alternative would be 0.48 million gallons per day (mgd) at buildout, as opposed to Phase I's 1.85 mgd. Peak-hour flows for the Existing Zoning Only Alternative would be lowered from 3.70 mgd to 0.96 mgd. The demand for water treatment and conveyance would be similarly reduced. Because the existing land use designation is incorporated into current

City projections, the demand for water under the Light Industrial Only Alternative would be consistent with anticipated water demand, no mitigation would be required for water supply treatment or conveyance.

Reclaimed water would not necessarily be used under this alternative, so the beneficial impacts of the Proposed Project on discharges to Dry Creek and reduced demand on potable water would not be anticipated.

#### Wastewater

The Existing Zoning Only Alternative would contribute an average 0.45 mgd to the wastewater conveyance system and a maximum daily flow of 1.04 mgd. This represents 0.81 mgd and 1.86 mgd, or 64 percent, less demand than under Phase I of the Proposed Project.

Existing and planned conveyance and treatment facilities would be adequate to accommodate wastewater generated by the Existing Zoning Only Alternative.

#### Solid Waste

The Existing Zoning Only Alternative would generate additional solid waste (approximately 2,865 tons per year), which would create the demand for additional collection services and affect the City's ability to meet State waste-reduction mandates. As with the Proposed Project, existing and planned landfill capacity would be adequate to accommodate the increase in solid waste.

#### Electricity

Under the Existing Zoning Only Alternative, electrical demand would be lower than under the Proposed Project, 8.80 megawatts (MW) compared to 11.79 MW. The reduction is less than for other utilities, largely because the factors for electrical usage assume that industrial facilities use more electricity than residential developments. The City assumed the light industrial designation in their planning for procurement of additional entitlements to electrical power; therefore, this is considered a less-than-significant impact.

#### Natural Gas

The Existing Zoning Only Alternative would use less natural gas than the Proposed Project, because industrial uses are assumed to require less natural gas than residential developments. As with the Proposed Project, this would be a less-than-significant impact, because the amount required, approximately 1.8 million therms, is well below the 6.3 million therms that are allocated to the City but unused.

Based on the above discussion, public service and utility impacts under the Existing Zoning Only Alternative would be less severe than impacts under the Proposed Project.



## CEQA Considerations

Significant irreversible effects of Alternative 2 would be similar to the Proposed Project, but less severe, including reduction in natural vegetation and wildlife communities, commitment of energy resources, alteration of visual character of the Plan Area, increased use of water, increased air emissions, and the short-term commitment of non-renewable and/or slowly renewed resources such as lumber, water, minerals, and energy, for construction.

Because the City's current plans anticipate light industrial uses on the Diamond Creek, Eskaton and Mourier 140 properties, the Existing Zoning Only Alternative would not induce unanticipated growth in the City of Roseville or surrounding areas.

As discussed throughout the above analysis, the impacts of the Existing Zoning Only Alternative would be very similar to the Proposed Project, but generally less severe because substantially fewer acres would be disturbed and no residential development would occur. Therefore, cumulative impacts would be similar to the Proposed Project (see Chapter 5.2), but the Existing Zoning Only Alternative would generally contribute a smaller portion to cumulative impacts. As with the Proposed Project, significant cumulative impacts would be anticipated for regional flooding, water quality degradation, loss of biological resources, alteration of the visual character of currently undeveloped portions of the city, congestion on local roadways, increased generation of air pollutants, increased demand for water supply, and increased demand for electricity.

### Significant and Unavoidable Impacts

Like the Proposed Project, the Existing Zoning Only Alternative would result in the following project-specific significant and unavoidable impacts:

- Loss of biological resources,
- Alteration in the visual character of the undeveloped areas,
- Increase in vehicle-generated air emissions, and
- Temporary increases in noise due to construction.

The Existing Zoning Only Alternative could have a significant and unavoidable impact on the City's jobs/housing balance; this impact would not be significant under the Proposed Project.

### **6.3.3 Alternative 3: Existing Zoning and Urban Reserve Development**

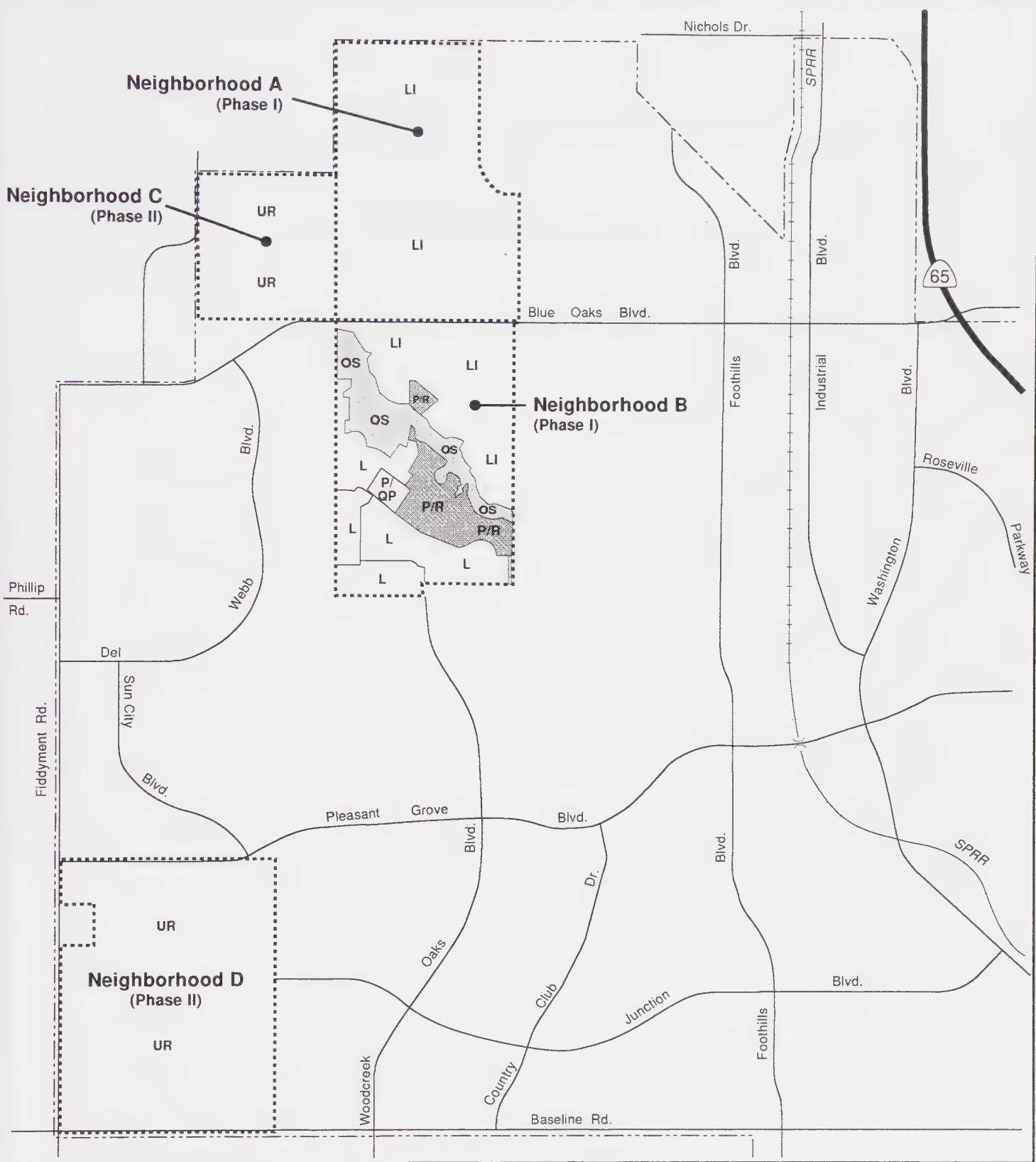
Like the Existing Zoning Only Alternative, Alternative 3 assumes that properties designated light industrial at present would be developed only with light industrial uses at 2010 market levels. A total of 1.57 msf of industrial development on 180 acres is assumed. In addition, land use designations for Woodcreek North would be identical to the Proposed Project. No development would occur in the Phase II Urban Reserves. Assumed land uses are shown in Table 6-3 and Figure 6-3.

Alternative 3 is compared to Phase I of the Proposed Project, because no development would occur in the Phase II portion of the Full Project. As shown in Table 6-3, Alternative 3 would



| TABLE 6-3                                                                                                                                                                                          |                |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------|
| ALTERNATIVE 3                                                                                                                                                                                      |                |                      |
| LIGHT INDUSTRIAL PLUS REZONE OF URBAN RESERVE                                                                                                                                                      |                |                      |
| Land Use                                                                                                                                                                                           |                | Acreage <sup>1</sup> |
| Residential Uses                                                                                                                                                                                   |                |                      |
| R-1<br>(LDR)                                                                                                                                                                                       | Acres<br>Units | 131.8<br>575.0       |
| R-1<br>(MDR)                                                                                                                                                                                       | Acres<br>Units | 0.0<br>0.0           |
| R-1<br>(HDR)                                                                                                                                                                                       | Acres<br>Units | 0.0<br>0.0           |
| Total Residential                                                                                                                                                                                  |                | 131.8<br>575.0       |
| Community Commercial (CC)                                                                                                                                                                          |                | 0.0                  |
| Business Professional (B-P)                                                                                                                                                                        |                | 0.0                  |
| 7-8 School (P/QP)                                                                                                                                                                                  |                | 0.0                  |
| K-6 School (P/QP)                                                                                                                                                                                  |                | 8.0                  |
| School Administration (P/QP)                                                                                                                                                                       |                | 0.0                  |
| Park (P/R)                                                                                                                                                                                         |                | 41.9                 |
| Open Space (OS)                                                                                                                                                                                    |                | 81.5                 |
| Fire Station                                                                                                                                                                                       |                | 0.0                  |
| Light Industrial <sup>2</sup>                                                                                                                                                                      |                | 466.5 <sup>2</sup>   |
| Street Right-of-Ways/Electric Substation                                                                                                                                                           |                | 6.6                  |
| Total Plan Acreage                                                                                                                                                                                 |                | 736.3                |
| Total Units                                                                                                                                                                                        |                | 575.0                |
| <sup>1</sup> Assumes Light Industrial uses in Diamond Creek, Eskaton and Mourier 140, and Proposed Project designations on Woodcreek North.<br><sup>2</sup> Of which 180 acres would be developed. |                |                      |
| SOURCE: Wade and Associates, 1997.                                                                                                                                                                 |                |                      |





- Neighborhood Boundary Within Specific Plan Area
- - - - - Roseville City Limits
- Open Space
- Parks
- Existing and Approved Roads
- LI=Light Industrial**
- OS=Open Space**
- P/R=Park-Recreation**
- P/QP=Public/Quasi-Public**
- UR=Urban Reserve**

**Figure 6-3**

**Light Industrial/Rezone  
Of Phase I Urban  
Reserve Alternative**

0 1/4 1/2

Scale In Miles

N

96063  
Base

**eip**

SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996; EIP Associates, May 1997.





result in the development of 575 dwelling units on 131.8 acres, compared to 2,523 units under the Proposed Project. There would be 41.9 acres dedicated to parks, 81.5 acres of open space, and one 8-acre elementary school.

Under the Alternative 3, there would be 1,461 residents and approximately 2,617 employees in the Plan Area, as opposed to 12,533 residents and approximately 1,395 employees under the Proposed Project.

This analysis assumes that roadways and infrastructure would be the same for the Alternative 3 as for Phase I of the Proposed Project.

### **Land Use**

Under Alternative 3, the approximately 450 acres of the Phase I area would be subject to development, compared to approximately 736 acres under Phase I of the Proposed Project. Therefore, impacts associated with physical changes in the character of the Plan Area, such as conversion of agricultural open space and loss of grazing land, would be similar to Phase I of the Proposed Project, but of lesser magnitude. As with the Proposed Project, all land use impacts would be less than significant, and no mitigation would be required.

The main difference between the land uses of Phase I of the Proposed Project and Alternative 3 is that light industrial uses would replace a large portion of residential and commercial uses in the Plan Area (in the Diamond Creek, Mourier 140 and Eskaton properties). Alternative 3 does contain a substantial amount (over 130 acres) of residential uses in the Plan Area. Consequently, the conflicts for Alternative 3 between land uses within the Plan Area and between the Plan Area and adjacent properties would be very similar in nature, but less severe than, Phase I of the Proposed Project. Conflicts with adjacent agricultural and industrial uses would be similar to Phase I of the Proposed Project, and could be mitigated by the use of buffers, landscape corridors, and minimum rear lot setbacks, as set forth in the City's North Area Design Guidelines, the NRSP Design Guidelines, and the Placer County General Plan. Similar conflicts could occur between the light industrial uses and residential areas within the Phase I area. Again, these impacts would be less than significant with the use of City and County design guidelines and standards.

The impacts of the Proposed Project that would be substantially reduced under Alternative 3 are the potential conflicts between residential development and the Western Regional Sanitary Landfill and the Sunset Industrial Area to the north of Diamond Creek. The landfill is located one mile from the northern boundary of the Plan Area. Under the Proposed Project, this portion of the Plan Area would be developed with residential uses, which could create conflicts due to the noise, odor, traffic, water contamination and visual impacts often associated with landfills. Because the Plan Area is outside of the County's buffer for the landfill, the impact is less than significant for the Proposed Project. The impact would be even less severe under Alternative 3, because the residential uses would be over one and one-half miles away from the landfill. Similarly, while conflicts between the Sunset Industrial area and residences would be reduced to less than significant with use of buffers, the impacts would be even less severe if industrial development occurred on the Diamond Creek site.

Based on the above analysis, land use impacts under Alternative 3 would be less severe than under the Proposed Project.

### **Population, Employment and Housing**

The population of the Plan Area would be substantially smaller under Alternative 3, because residential development would not occur in the Diamond Creek, Mourier 140 or Eskaton properties. The population would be approximately 1,461 as opposed to the Proposed Project, which would have a population of 5,992 in Phase I. In both cases, the increases to the City's population would be a less-than-significant impact.

Alternative 3 would generate 1.57 million square feet (msf) light industrial uses at 2010, creating the potential for almost 2,617 jobs, compared to approximately 1,215 jobs under the Proposed Project. Employment generated by light industrial development is consistent with the current General Plan and would be a less-than-significant impact in itself. Employees of Alternative 3 would generate a demand for approximately 1,953 homes. In order to be consistent with the City's jobs/housing balance policy (Resolution 83-118), approximately 1,563 homes of these workers would need to be within eight miles of their worksites, and approximately 1,172 would need to reside within six miles of their worksite. The Plan Area would provide approximately 575 new homes well within six miles of the light industrial area. Additional homes might be found in other areas planned for residential development within eight miles of the Plan Area. However, the City cannot guarantee that housing would be available in other jurisdictions. Because Alternative 3 does not contain a sufficient number of houses to meet the jobs/housing balance policy given the amount of light industrial land it contains, it could have a significant and unavoidable impact on the City's jobs/housing balance.

Alternative 3 would increase the City's housing supply by approximately 575 units. This is considered a beneficial impact, although of substantially lesser magnitude than the Proposed Project. In order to meet the City's affordable housing goal, 58 units would have to be affordable (ten percent). Alternative 3 does not include any high-density residential units, so single family homes would need to be made available to low and moderate income households. With implementation of General Plan and NRSP policies for affordable housing, this would be a less-than-significant impact.

Alternative 3 would not provide as substantial a benefit to the City of new housing as the Proposed Project. In addition, the City may not be able to meet its jobs/housing balance policy under Alternative 3, because it would not provide enough housing to meet the demand of light industrial employees in the Plan Area. For these reasons, population, employment and housing impacts under Alternative 3 would be more severe than under the Proposed Project.

### **Geology, Soils and Seismicity**

Under Alternative 3, impacts would be similar to those under Phase I of the Proposed Project. Development under this alternative would result in the following impacts: development in an area of seismic activity, development in an area of soil constraints, potential slope instability and subsequent erosion; inaccessibility to potential mineral resources located on the Plan Area; and



topographic changes due to grading. This alternative would include an increase in the number of employees and a decrease in the number of residents over that of Phase I of the Proposed Project. Because seismic activity is of greater concern with residential development, Alternative 3, which has fewer dwelling units than the Proposed Project, would have a less severe impact due to seismic risk. The remaining geologic and soils impacts are dependent more on the extent of development rather than the type of land use. Alternative 3 would result in development of approximately 450 acres, compared to 736 acres under the Proposed Project. In either case, Mitigation Measure 4.3-1, which requires adherence to recommendations of a geotechnical study, would be needed to address soils constraints and slope instability. No other mitigation measures would be required for either Alternative 3 or the Proposed Project.

Because Alternative 3 would expose fewer residents to seismic hazards and would result in fewer acres being developed than the Proposed Project, geologic, soils and seismicity impacts would be less severe under Alternative 3 than under the Proposed Project.

### **Hydrology and Water Quality**

Under Alternative 3, impacts would be similar to those under Phase I of the Proposed Project, because impervious surface would be created, leading to increases in stormwater runoff. However, fewer acres would be developed on the Diamond Creek, Eskaton and Mourier 140 properties, so erosion-related water quality impacts would be less severe than impacts of the Proposed Project. Assuming that no development occurred in the floodplain, as with Phase I of the Proposed Project, impacts on flooding, groundwater recharge, and water quality would be less than significant with compliance with State and City standards and implementation of Mitigation Measures 4.4-1 and 4.4-2, which address construction of recreational facilities in the flood fringe (which could occur on Woodcreek North under Alternative 3) and participation in the development of regional detention facilities.

Because the amount of grading and impervious surface would be reduced, the hydrologic and water quality impacts of Alternative 3 would be less severe than those of the Proposed Project.

### **Biological Resources**

Under Alternative 3, impacts on biological resources would be similar to those of Phase I of the Proposed Project, because the amount and configuration of open space areas, which would preserve riparian and woodland habitats, would be the same. Impacts on wildlife habitat oak woodlands, wetlands and oak trees would still occur, as would the impacts related to wildlife habitat and movement, special-status plant and animal species, and Swainson's hawk and other raptor's foraging and nesting habitat. As with the Proposed Project, construction impacts on wildlife, including raptors' nests, could be reduced to less-than-significant levels with implementation of Mitigation Measures 4.5-2, which calls for the development of construction protocols, and 4.5-4, which calls for nest surveys and avoidance procedures. Impacts on vernal pools could be reduced through preservation, recreation and/or purchase of mitigation bank credits (Mitigation Measure 4.5-3), but the impact would remain significant and unavoidable, as would impacts on oak trees (short-term), wildlife habitat, and vernal pool plants and fairy shrimp.

While the biological impacts of Alternative 3 would be similar in kind to the Proposed Project, less wildlife habitat (particularly grassland) would be lost because fewer acres would be developed on the Diamond Creek, Eskaton and Mourier 140 properties. Therefore, the biological impacts of Alternative 3 are considered less severe than those of the Proposed Project.

### **Cultural Resources**

Development under Alternative 3 would result in impacts similar to Phase I of the Proposed Project regarding damage or destruction of recorded and undiscovered prehistoric or historic sites. As with the Proposed Project, these impacts could be reduced to less-than-significant levels with Mitigation Measure 4.6-1, which requires that construction activities cease if a prehistoric or historic resource is uncovered, and that a qualified archaeologist assess the find. Even with mitigation, the potential for disturbing subsurface cultural resources would be smaller under Alternative 3, because fewer acres would be subject to development on the Diamond Creek, Eskaton and Mourier 140 properties.

CA-PLA-429, an archaeological site on the Diamond Creek and Walaire 160 properties, may or may not be developed under Alternative 3. Under the Proposed Project, site CA-PLA-429 would be located in open space. As with the Proposed Project, impacts on site CA-PLA-429 would be less than significant with implementation of Mitigation Measures 4.6-2(a) and (b), which call for archaeological testing of CA-PLA-429 to determine its significance, and, if the site is significant, preservation or recordation.

Site CA-PLA-138, which is located on the Walaire 160 property, would not be affected by Alternative 3 or Phase I of the Proposed Project.

Because fewer acres would be developed under Alternative 3, the potential to disturb undiscovered cultural resources would be less than the Proposed Project. Therefore, Alternative 3 would have less severe impacts on cultural resources than the Proposed Project.

### **Aesthetics and Visual Quality**

Under Alternative 3, impacts would be similar to those under Phase I of the Proposed Project. Development under this alternative would result in changes to the existing undeveloped character of the Plan Area, visual incompatibility between the light industrial and residential development, the introduction of artificial light and associated glare into an undeveloped area, and aesthetic impacts related to construction activities adjacent to newly occupied residential dwellings. The change of the Plan Area's visual character would be significant and unavoidable as it was with the Proposed Project, and the remaining impacts would be less than significant with compliance with City standards and NRSP Design Guidelines.

Because fewer acres would be developed, impacts under Alternative 3 would be less severe than impacts under the Proposed Project.



## **Hazardous Materials and Public Safety**

Under Alternative 3, impacts would generally be similar to those under Phase I of the Proposed Project. However, impacts related to demand for emergency response, improper disposal of household hazardous waste and effects of the electromagnetic fields would be slightly lessened, because there would be fewer residential units constructed, while impacts related to increased risk for hazardous materials spills or releases during transport through the area would be slightly increased, due to an increase in industrial development. Similarly, impacts related to existing or known hazards in the area from past land use and risk of fire would be slightly less severe because fewer acres would be developed. Overall, hazardous materials impacts would be slightly more severe than Phase I of the Proposed Project, because of the increase in Light industrial development.

## **Transportation and Circulation**

A minimal transportation system was assumed to provide access between the light industrial portions of the Plan Area and the City's transportation system.

Daily vehicle trip generation under this alternative at 2010 conditions would be approximately 13,900 vehicles, which would be lower than Phase I of the Proposed Project (33,700). Projected traffic volumes under Alternative 3 are shown in Figure 6-4. No level of service impacts beyond those discussed under the Proposed Project would result under this alternative.

Demand for transit services and bicycle facilities would be significantly lower under this alternative compared to the Proposed Project due to the predominantly industrial use of the site.

While there is little difference in level of service impacts between this alternative and the Proposed Project, this alternative would contribute approximately 20,000 fewer daily vehicle trips to the City's transportation system; therefore, Alternative 3 would result in less severe impacts than the Proposed Project.

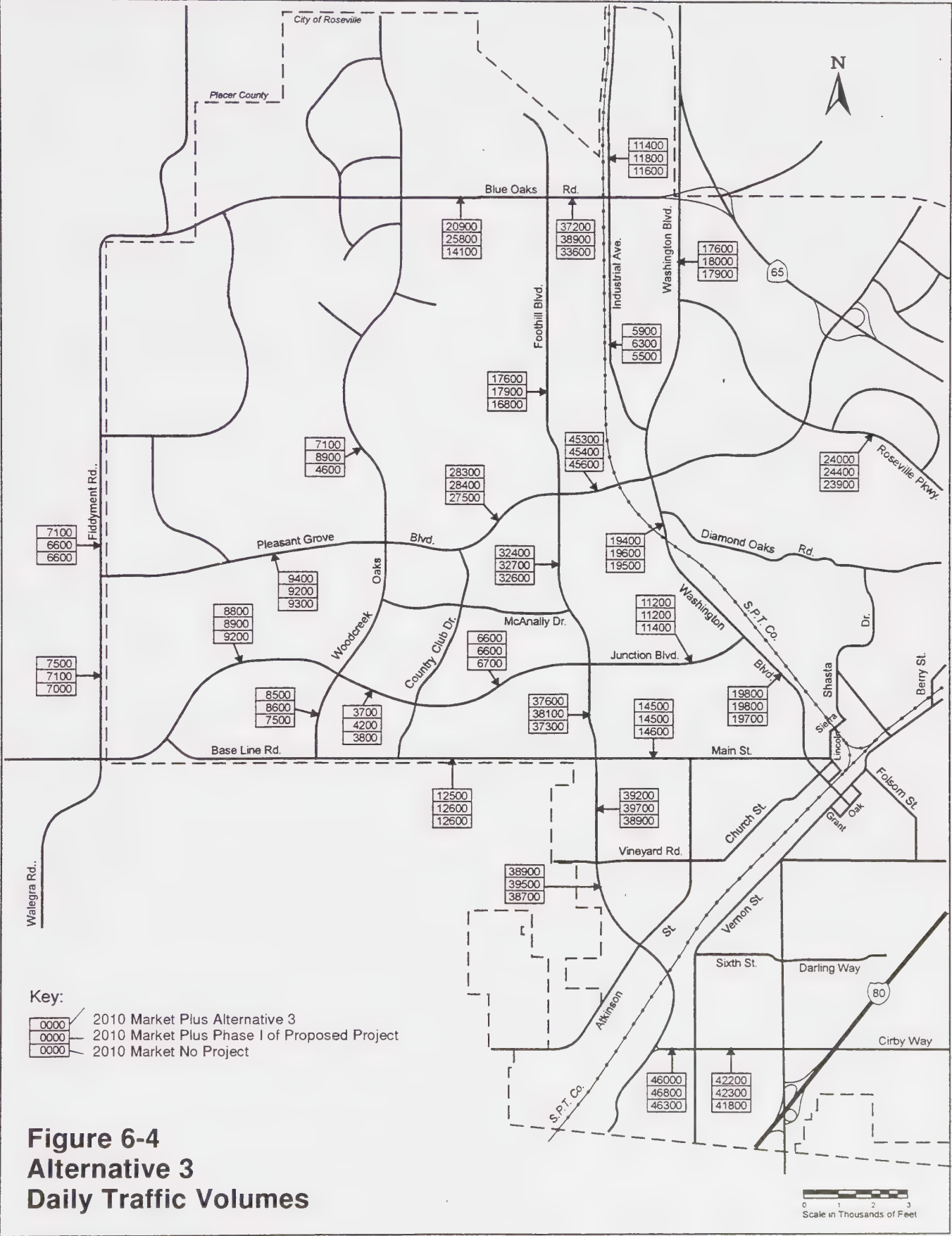
## **Air Quality**

Development under Alternative 3 would result in impacts on air quality in the Roseville area. Short-term emissions of PM<sub>10</sub> and NO<sub>x</sub>, ROG, SO<sub>2</sub> and CO would be generated by construction equipment and associated activities during development of the industrial and residential uses in the Plan Area under this alternative. Air emissions would be less than those associated with Phase I of the Proposed Project because fewer acres would be disturbed under Alternative 3. As with the Proposed Project, this impact would be less-than-significant with implementation of Mitigation Measures 4.10-1(a) and (b), which require dust controls and equipment maintenance.

Impacts related to CO at intersections and regional air pollution would be lessened under this alternative, due to the reduction in vehicle trips. As with the Proposed Project, these impacts would be less than significant.











Minor odor impacts on residents in the NRSP would be slightly increased under this alternative because there would be increased industrial development. However, this impact would still be considered less than significant because the odor increases are anticipated to be minor. Impacts related to inconsistencies with the Placer County Air Quality Attainment Plan would be similar to those identified for Phase I of the Proposed Project. Although there would be a decrease in residential development under this alternative, the increased residential growth would be substantial enough to create a significant impact.

A greater number of industrial uses would be developed under this alternative. The construction of industrial uses, as well as existing and future light industrial operations would generate increased amounts of criteria air pollutants and toxic air contaminants. Residents in the Woodcreek North Area and the Del Webb Specific Plan could be exposed to these pollutants/contaminants. This impact is similar to the Proposed Project; however, due to increased development of industrial uses under this alternative, the magnitude of the impact would be slightly increased over Phase I of the Proposed Project.

Because fewer acres would be developed, impacts under Alternative 3 would be less severe than impacts under the Proposed Project.

## Noise

Under Alternative 3, the impacts related to construction noise, future traffic noise, and train noise would be similar to those identified for the Proposed Project. Construction activities could result in short-term noise levels that exceed City standards at adjacent residential areas (on and offsite). As with the Proposed Project, this would be a temporary significant and unavoidable impact.

Residential areas developed within Alternative 3 would experience traffic noise levels lower than those under the Proposed Project, because traffic volumes would be lower. Only residents along Pleasant Grove Boulevard, just east of Fiddymont Road, and residents along the Woodcreek North east-west connector, just west of Junction Boulevard, would experience noise levels similar to those expected for the Proposed Project. These increases in noise levels, however, are expected to be insignificant. Impacts related to industrial uses would increase slightly due to the higher level of industrial development under this alternative, but this noise impact would be less than significant due to compliance with City standards. Impacts from other non-traffic noise sources would not occur, because only industrial uses would be developed adjacent to the pump station and the peaking facility. Therefore, Mitigation Measure 4.11-2 would not be required for Alternative 3.

Because traffic noise would be lower, and residential development would not occur in proximity to the peaking facility or pump station, impacts under Alternative 3 would be less severe than impacts under the Proposed Project.

## Public Services and Utilities

### Water

Alternative 3 would have a lower water demand at 2010 than Phase I of the Proposed Project, 0.92 mgd average daily demand compared with 1.85 mgd. This difference would apply to peak daily and peak hour flows as well. For Alternative 3, peak hour flows would be 1.83 mgd, while peak hour flows for the Proposed Project would be 3.70 mgd at 2010. Impacts on water treatment and conveyance would also be less severe under Alternative 3 at 2010. As discussed in Chapter 4.12, by buildout the net difference between the existing land use designations and the Proposed Project would be substantially narrowed, to 0.5 mgd in Phase I. These impacts would be less than significant because existing and planned supply, treatment capacity and conveyance facilities are adequate.

### Wastewater

Under Alternative 3, demand for wastewater treatment and conveyance would be substantially lower (40 percent) under Phase I of the Proposed Project at 2010. Alternative 3 would generate an average wastewater flow of 0.52 mgd and a maximum daily flow of 1.20 mgd at 2010. As with the Proposed Project, the increased demand for wastewater treatment and conveyance would be less than significant, because existing and planned facilities would be adequate to convey and treat the additional wastewater.

### Police and Fire

Alternative 3 would generate a smaller demand for police and fire services than the Proposed Project, because of the lower number of residential units. Alternative 3 would require approximately 0.7 additional police officer, as opposed to seven officers under the Proposed Project. Impacts on fire services would be the same as Phase I. A new fire station would be needed to provide services to the residents in Woodcreek North. These impacts could be reduced to less-than-significant levels with implementation of Mitigation Measure 4.12-1, calling for an increase in police officers, and Mitigation Measure 4.12-2, which requires construction of a new fire station.

### Solid Waste

Alternative 3 would generate approximately 4,700 tons per year of solid waste, compared to 7,550 tons under the Proposed Project. The increase in solid waste would create the demand for additional collection services and affect the City's ability to meet State waste-reduction mandates. However, the landfill capacity is adequate to accommodate the increase in solid waste (under either Alternative 3 or the Proposed Project), so impacts on solid waste would be less than significant.

### Electricity

Alternative 3 would require similar amounts of electricity to the Proposed Project, 11.0 MW compared to 11.79 MW for Phase I of the Proposed Project. This amount could be met by existing and projected electrical supply.

### Natural Gas

Alternative 3 would use less natural gas than Phase I of the Proposed Project, because it contains more industrial uses, which are assumed to require less natural gas than residential developments. As with the Proposed Project, this would be a less-than-significant impact because the amount required would be well below the unused 109.5 million therms that are allocated to the City.

### Schools

Alternative 3 would generate a smaller number of school children than Phase I: 136 high school students and 344 K-8 students. An elementary school would be located in the Woodcreek North site, so K-6 students would be accommodated by the project itself. Existing high school capacity is not adequate to serve the increase in high school students. However, as with the Proposed Project, the General Plan requires that school facilities must be shown to be available before the City approves a project, and new projects must pay school impact fees. Therefore, as with the Proposed Project, impacts on schools would be less than significant.

### Parks

Alternative 3 would generate a demand for 5.2 acres of parkland, while providing over 40 acres of active parks and 81.5 acres of open space. Therefore, this is considered a less-than-significant impact. Demand for parkland would be a less-than-significant impact for the Proposed Project, as well.

### Libraries

Alternative 3 would create the need for 300 to 350 square feet of library space. As with the Proposed Project, this impact would be less than significant.

## **CEQA Considerations**

Significant irreversible effects under Alternative 3 would be similar to the Proposed Project, but less severe, including reduction in natural vegetation and wildlife communities, commitment of energy resources, alternation of visual character of the Plan Area, increased use of water, increased air emissions; and the short-term commitment of non-renewable and/or slowly renewed resources such as lumber, water, minerals, and energy, for construction.

Because the City's current plans anticipate light industrial uses on the Diamond Creek, Eskaton and Mourier 140 properties, the industrial development under Alternative 3 would not induce unanticipated growth in the City of Roseville or surrounding areas. The residential component



would absorb a portion of urban reserve, which could spur additional development in the City and surrounding region, including other urban reserve areas. To the extent that such residential development would accelerate development in and around the City, it could be considered growth-inducing.

As discussed throughout the above analysis, the impacts of Alternative 3 would be very similar to the Proposed Project, but generally less severe because substantially fewer acres would be disturbed and less residential development would occur. Therefore, cumulative impacts would be similar to the Proposed Project (see Chapter 5.2), but Alternative 3 would generally contribute a smaller portion to cumulative impacts. As with the Proposed Project, significant cumulative impacts would be anticipated for regional flooding, water quality degradation, loss of biological resources, alteration of the visual character of currently undeveloped portions of the city, congestion on local roadways, increased generation of air pollutants, increased demand for water supply, and increased demand for electricity.

### Significant and Unavoidable Impacts

Like the Proposed Project, Alternative 3 would result in the following project-specific significant and unavoidable impacts:

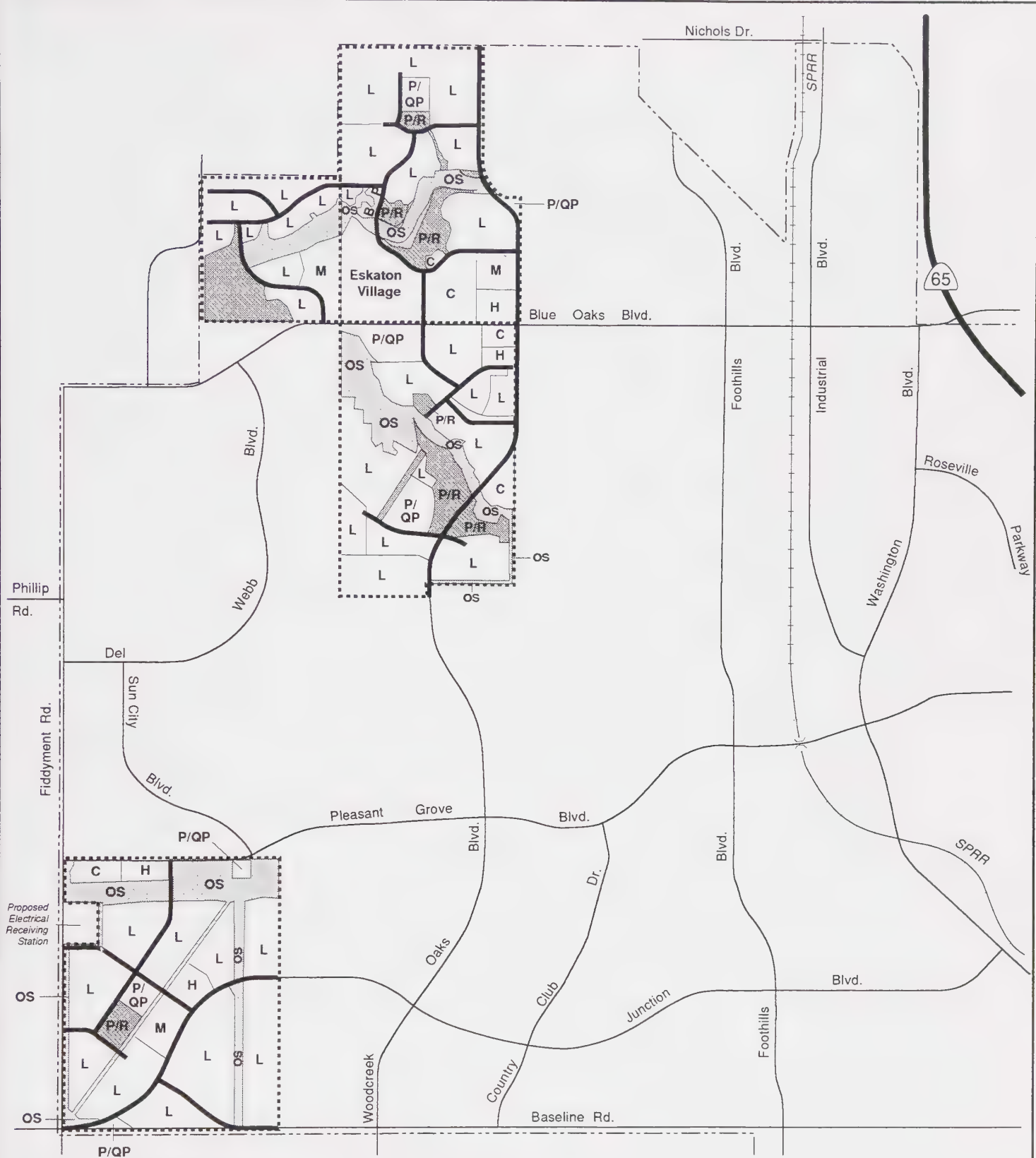
- Loss of biological resources,
- Alteration in the visual character of the undeveloped areas,
- Increase in vehicle-generated air emissions, and
- Temporary increases in noise due to construction.

Alternative 3 could have a significant and unavoidable impact on the City's jobs/housing balance; this impact would not be significant under the Proposed Project.

### 6.3.4 Alternative 4: Lower-Density Alternative

The Lower-Density Alternative provides fewer residential units overall by reducing the densities on certain parcels. The main difference between Alternative 4 and the Proposed Project is that this alternative would have 362 fewer residential units in Phase I. All parcel boundaries would remain the same as for the Proposed Project in Phase I; however, the densities would be reduced on certain parcels, resulting in the lower number of dwelling units. Other land uses in the Plan Area would be the same or vary only slightly. For example, Phase II would have 2,575 residential units under the Proposed Project, or 2,586 units under Alternative 4. Figure 6-5 shows the land uses assumed for Alternative 4.

As shown in Table 6-4, the Lower-Density Alternative includes 912.6 acres of residential uses, as opposed to 911.2 acres under the Proposed Project, but only 4,736 residential units, compared to 5,098 units under the Proposed Project. Under the Lower-Density Alternative, Full Project residential uses would result in a Plan Area population of 11,613, which is approximately 920 residents fewer than the Proposed Project. The other uses are similar to the Proposed Project, including 44.4 acres of commercial, 4.4 acres of business professional 191.3 acres of open space,



|                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>----- Neighborhood Boundary Within Specific Plan Area</p> <p>..... Roseville City Limits</p> <p>□ Open Space</p> <p>▨ Parks</p> <p>— Existing and Approved Roads</p> <p>— Proposed Roads</p> | <p><b>L</b>=Low Density Residential (LDR)</p> <p><b>M</b>=Medium Density Residential (MDR)</p> <p><b>H</b>=High Density Residential (HDR)</p> <p><b>C</b>=Commercial (COMM)</p> <p><b>BP</b>=Business-Professional</p> <p><b>P/R</b>=Park-Recreation</p> <p><b>P/QP</b>=Public/Quasi Public</p> <p><b>OS</b>=Open Space</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

SOURCE: Wade Associates, EIP Associates, May 1997.

**Figure 6-5**

**Lower Density Alternative**

0 1/4 1/2

Scale In Miles

N

96063 Base

**eip**





**TABLE 6-4**  
**ALTERNATIVE 4**  
**LOWER DENSITY ALTERNATIVE**  
**LAND USE ALLOCATION**

| Land Use                                                   |                | Phase I                                    | Phase II         | Total                                      |
|------------------------------------------------------------|----------------|--------------------------------------------|------------------|--------------------------------------------|
| Residential Uses                                           |                |                                            |                  |                                            |
| R-1 (LDR)                                                  | Acres<br>Units | 389.1<br>1,490.0                           | 390.6<br>1,842.0 | 779.7<br>3,332.0                           |
| R-1 (MDR)                                                  | Acres<br>Units | 9.2<br>72.0                                | 36.6<br>298.0    | 45.8<br>450.0                              |
| R-1 (HDR)                                                  | Acres<br>Units | 13.4<br>188.0                              | 22.5<br>446.0    | 35.9<br>546.0                              |
| Eskaton Village Units<br>(Independent Living) <sup>1</sup> |                | 51.2<br>400.0                              | 0.0<br>0.0       | 51.2<br>400.0                              |
| (Licensed Care)                                            |                | 200.0                                      | 0.0              | 200.0                                      |
| Total Residential                                          |                | 462.9 <sup>2</sup><br>2,150.0 <sup>3</sup> | 449.7<br>2,586.0 | 912.6 <sup>2</sup><br>4,736.0 <sup>3</sup> |
| Community Commercial (CC)                                  |                | 37.6                                       | 6.8              | 44.4                                       |
| Business Professional (B-P)                                |                | 4.4                                        | 0.0              | 4.4                                        |
| 7-8 School (P/QP)                                          |                | 22.3                                       | 0.0              | 22.3                                       |
| K-6 School (P/QP)                                          |                | 18.0                                       | 10.0             | 28.0                                       |
| School Administration (P/QP)                               |                | 0.0                                        | 3.8              | 3.8                                        |
| Park (P/R)                                                 |                | 75.7                                       | 28.8             | 104.6                                      |
| Open Space (OS)                                            |                | 78.0                                       | 112.7            | 191.3                                      |
| Fire Station                                               |                | 0.0                                        | 1.5              | 1.5                                        |
| Street Right-of-Ways/Electric Substation                   |                | 40.0                                       | 38.8             | 78.8                                       |
| Total Plan Acreage                                         |                | 739.2                                      | 652.3            | 1,391.5                                    |
| Total Units                                                |                | 2,150.0                                    | 2,586.0          | 4,736.0                                    |

<sup>1</sup> Eskaton also includes licensed care and associated services.

<sup>2</sup> 419.3 acres without the 51.2 acre Eskaton Village.

<sup>3</sup> 1,750 without Eskaton Village units.

SOURCE: Wade and Associates, 1996.

and 104.6 acres of parks. Like the Proposed Project, Alternative 4 would have two elementary schools and a junior high school.

For this analysis, it is assumed that the roadway system and infrastructure would be the same as those planned for the Proposed Project.

Two scenarios were considered for the Lower-Density Alternative -- Phase I and Full Project. Where impacts differ between the scenarios, Alternative 4 is compared to both Phase I and Full Project of the Proposed Project. This occurs primarily where impacts result from population increases (e.g., traffic, air quality, noise and public services), so the reduction of 362 units in Phase I would decrease impacts. Where there is no difference between Phase I and Full Project impacts, Full Project for the Lower Density Alternative is compared to Full Project for the Proposed Project.

As with the Proposed Project, the evaluation of Alternative 4 assumes that General Plan policies, Improvement Standards, and Design Standards would be implemented.

### **Land Use**

The Lower-Density Alternative would convert a substantial amount of agricultural open space (approximately 1,200 acres) to urban uses. This impact would be almost identical to the Proposed Project. The loss of grazing land would be a less-than-significant impact because of the relatively low value and non-irrigation status of the Plan Area.

As with the Full Project, the portions of Fiddymment Road adjacent to the Plan Area would need to be annexed to the City for Phase II. This is a less-than-significant impact.

Conflicts with adjacent industrial and agricultural uses and the landfill would be slightly less than under the Proposed Project, because the Lower-Density Alternative would bring fewer residents into the Plan Area. Potential conflicts between internal uses, such as commercial and residential, and electrical utilities and residential, would differ little from the Proposed Project. For both the Lower-Density Alternative and the Proposed Project, all of these potential conflicts would be less than significant with the use of City and County required buffers and existing design guidelines and standards.

Based on the above analysis, land use impacts under Alternative 4 would be slightly less severe than under the Proposed Project (Phase I and Full Project).

### **Population, Employment and Housing**

Impacts for population, employment and housing would be similar to the Proposed Project. The Lower-Density Alternative has fewer housing units than the Full Project (4,736 compared to 5,098, or approximately 7 percent less) and slightly fewer acres of employment-generating uses than the Proposed Project (48.8 acres versus 49 acres). Therefore, the Lower-Density Alternative would result in a population of 11,613, and 1,390 jobs. Like the Proposed Project, Alternative

4 would contain ample housing to satisfy the City's jobs/housing policy of providing housing in close proximity to employment.

Like the Proposed Project, all population, employment and housing impacts would be less than significant under Alternative 4. The benefits of providing additional housing in the City of Roseville would be slightly lower under Alternative 4, so it is considered to have more severe impacts than the Proposed Project.

### **Geology, Soils, and Seismicity**

Under the Lower-Density Alternative, impacts would be similar or identical to those under the Proposed Project, although slightly fewer residents would be exposed to seismic risk. Lower-Density Alternative impacts related to soils constraints and slope stability would be identical to the Proposed Project, because the amount of acreage would be almost identical. For both the Lower-Density Alternative and the Proposed Project, adherence to the geotechnical recommendations (per Mitigation Measure 4.3-1) would reduce soils constraints and slope stability impacts to less-than-significant levels. The potential loss of mineral resources and changes in topography would be less-than-significant impacts under both the Lower-Density Alternative and the Proposed Project, and would be almost identical due to the similar amounts of acreage assumed to be developed.

Because fewer residents would be subjected to seismic risks, the Lower-Density Alternative would result in slightly less severe geologic impacts than the Proposed Project. All of the geology impacts would be less than significant upon compliance with City standards and geotechnical recommendations.

### **Hydrology and Water Quality**

Under the Lower-Density Alternative, impacts on flooding, groundwater recharge and water quality would be similar or identical to those under the Full Project because a similar area would be disturbed and the amount of stormwater runoff would be similar. As with the Proposed Project, water quality impacts would be less than significant due to the use of BMPs required by State and City standards. Onsite and offsite flood impacts would be less than significant due to compliance with State and City standards and implementation of Mitigation Measures 4.4-1 and 4.4-2, which address placement of structures in the flood fringe and participation in a regional detention basin.

Because the amount of impervious surface and grading would be essentially the same, the hydrologic and water quality impacts of Alternative 4 would be the same as those of the Proposed Project.

### **Biological Resources**

Under Alternative 4, the Plan Area would be developed with the same uses, but approximately 1.9 fewer acres of open space would be provided. Therefore, biological impacts would be almost identical to the Full Project. As with the Proposed Project, construction impacts on wildlife,



including raptors' nests, could be reduced to less-than-significant levels with implementation of Mitigation Measures 4.5-2, which calls for the development of construction protocols, and 4.5-4, which calls for nest surveys and avoidance procedures. Impacts on vernal pools could be reduced through preservation, recreation and/or purchase of mitigation bank credits (Mitigation Measure 4.5-3), and use of inoculate in new pools (Mitigation Measure 4.5-4), but the impact would remain significant and unavoidable, as would impacts on oak trees (short-term), wildlife habitat, and vernal pool fairy shrimp.

Because the same amount of biological resources would be lost, the biological impacts of the Lower-Density Alternative would be the same as those of the Proposed Project.

### **Cultural Resources**

Development under the Lower-Density Alternative would result in impacts similar to the Proposed Project regarding damage or destruction of recorded prehistoric or historic sites due to construction and development and potentially damaging undiscovered cultural resources. Mitigation Measures 4.6-1 (a) and (b), which requires that construction activities cease if a prehistoric or historic resource is uncovered, and that a qualified archaeologist assess the find, would reduce this impact to a less-than-significant level.

Two known cultural sites occur in the Plan Area, CA-PLA-429, on the Diamond Creek and Walaire 160 properties, and CA-PLA-138, on the Walaire 160 property. As with the Proposed Project, both sites would be located in open space under Alternative 4. Even so, these sites could be disturbed by Plan Area residents using the open space. Impacts on CA-PLA-429 and CA-PLA-138 would be less than significant with implementation of Mitigation Measures 4.6-2(a) and (b), which call for archaeological testing to determine the sites' significance, and, if the sites are significant, preservation or recordation.

Based on the above analysis, impacts on cultural resources under Alternative 4 would be the same as those under the Proposed Project.

### **Aesthetics and Visual Quality**

Under the Lower-Density Alternative, impacts would be similar to those under the Full Project. Development under this alternative would result in a change in the undeveloped character of the area, the introduction of artificial light and associated glare into a rural area, and aesthetic impacts related to construction activities adjacent to newly occupied residential dwellings. The change in visual character of the area would be found significant as it was with the Proposed Project, and the remaining impacts would be less than significant due to compliance with the City's design standards and the NRSP Design Guidelines.

Based on the above analysis, impacts on visual resources under Alternative 4 would be the same as impacts under the Proposed Project.

## **Hazardous Materials**

Under the Lower-Density Alternative, impacts would generally be similar to those under the Proposed Project. Development would result in impacts related to improper disposal of household hazardous waste, increased risk for hazardous materials spills or releases during transport through the area, increased fire risk, existing or known hazards in the area from past land use, and effects of EMF. As with the Proposed Project, impacts associated with the Lower-Density Alternative would be less than significant due to compliance with State and City requirements, and, in the case of fire hazard, with implementation of Mitigation Measure 4.8-1, which provides fire prevention measures for the construction period.

Based on the above analysis, impacts related to hazardous materials and public safety under Alternative 4 would be the same as those under the Proposed Project.

## **Transportation and Circulation**

Phase I of Alternative 4 would generate approximately 27,800 daily vehicle trips under this alternative, compared to approximately 33,700 daily vehicle trips under the Proposed Project, a difference of 17.5 percent. The total trip generation of the project (Phase I and II combined) under this alternative would be approximately 54,000 daily vehicle trips, compared to 57,900 under the Proposed Project (a seven percent difference). Traffic volumes for Phase I and Full Project of Alternative 4 are shown in Figures 6-6 and 6-7, respectively.

Transportation-related impacts of this alternative were analyzed under 2010 Market conditions, first assuming Phase I only and then assuming both phases. In both cases, traffic generated by Alternative 4 (for the Full Project) would produce unacceptable service levels on Blue Oaks Boulevard between Foothills Boulevard and the Woodcreek Oaks Boulevard and at the intersection of Foothills and Blue Oaks Boulevard. The Proposed Project would also result in these impacts. For both Alternative 4 and the Proposed Project, the traffic impacts would be reduced to less-than-significant level with Mitigation Measure 4.9-2, which provides for updating the City's CIP with appropriate traffic improvements.

Because the residential uses and population of the Plan Area would be slightly lower under Alternative 4 than under the Proposed Project, the demand for transit services and bicycle facilities would be slightly less severe. The demand for transit services could be reduced to a less-than-significant level by updating the Long Range Transit Master Plan (Mitigation Measure 4.9-1). The impact on bicycle facilities would be less than significant.

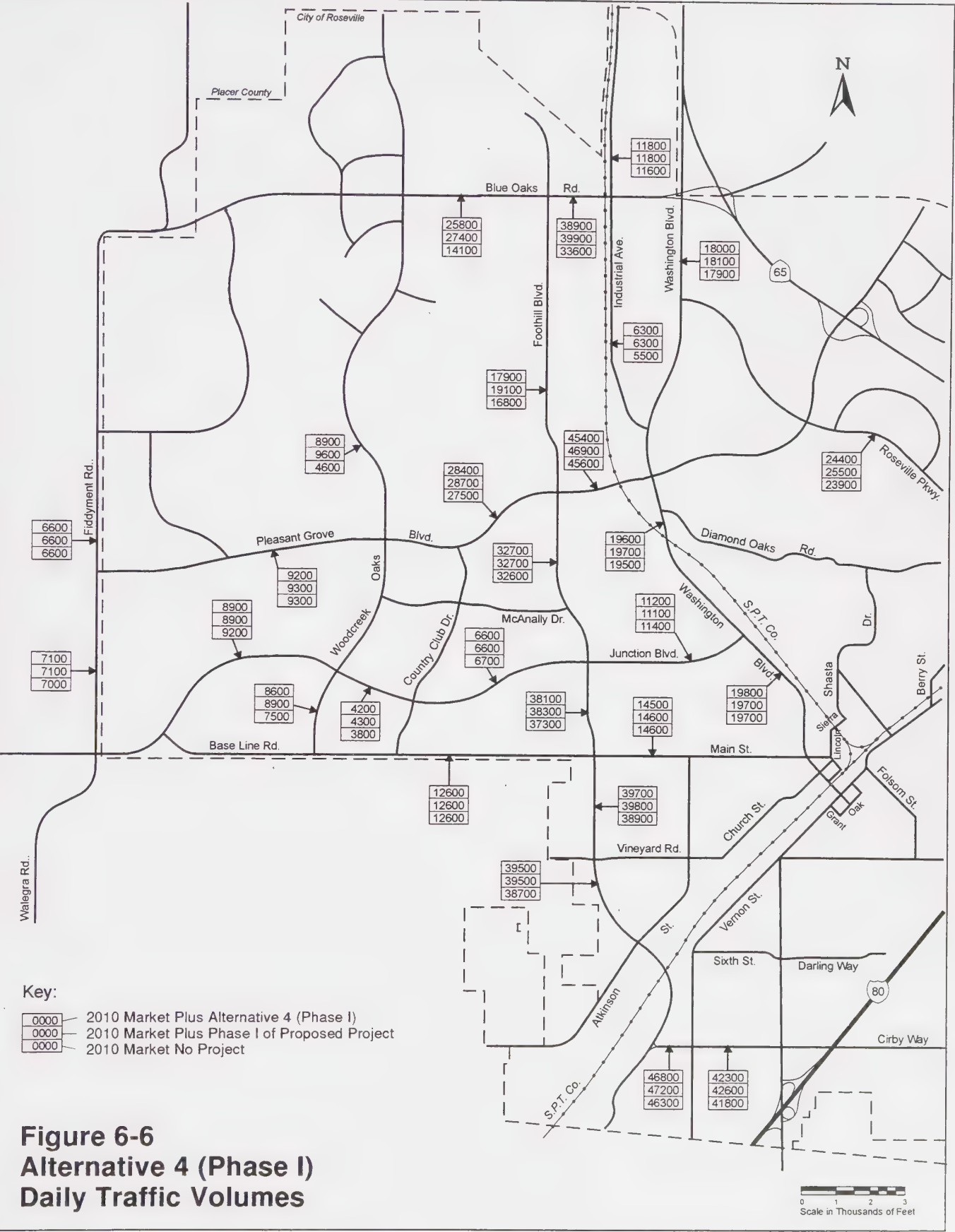
Because Alternative 4 would generate fewer traffic trips and less demand for transit services and bicycle facilities, the traffic and transportation impacts of Alternative 4 would be slightly less severe than those of the Proposed Project.

## **Air Quality**

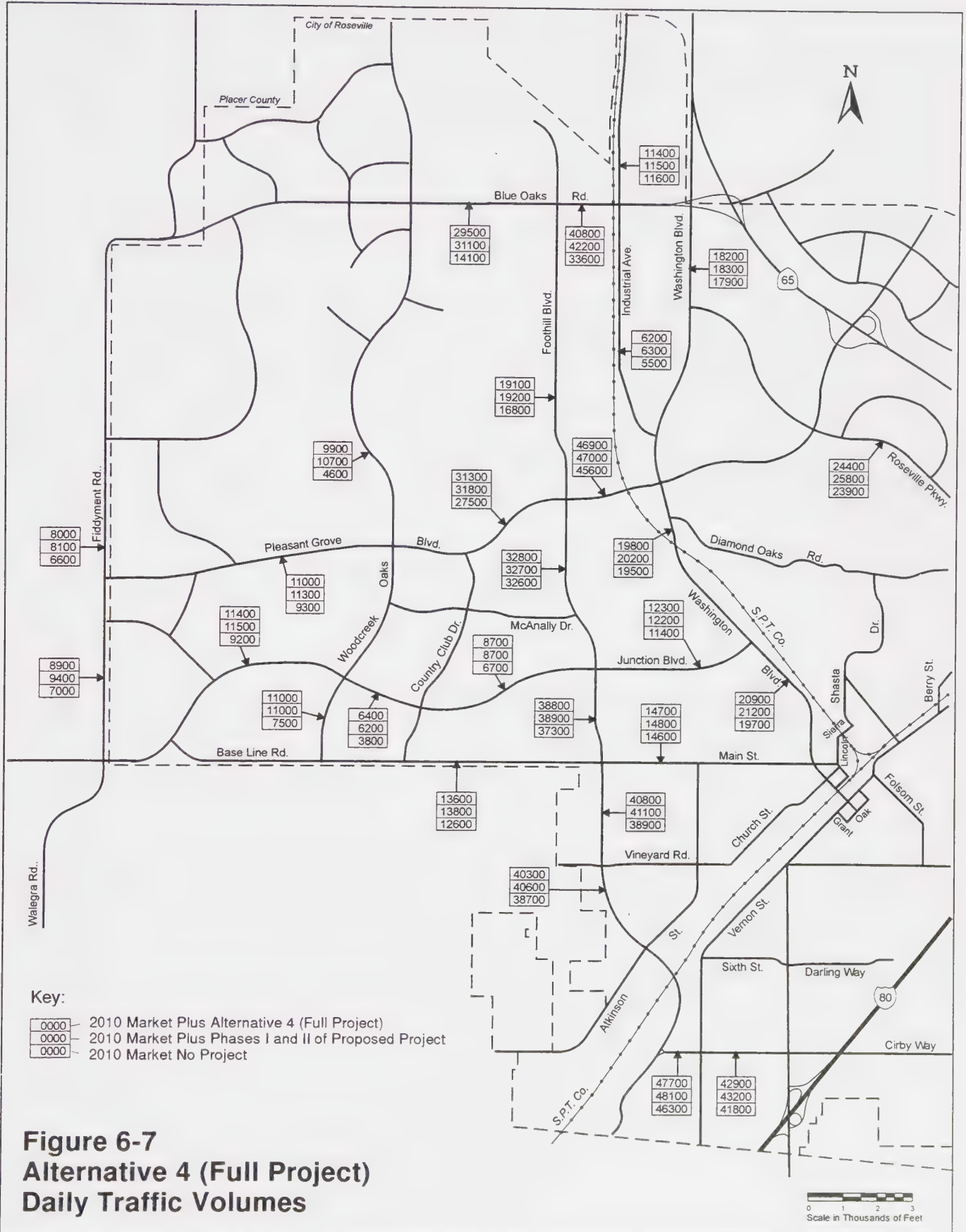
Air quality impacts under the Lower-Density Alternative would be similar to the Full Project, because the area developed would be similar. Short-term emissions of PM<sub>10</sub> and NO<sub>x</sub>, ROG, SO<sub>2</sub>















and CO would be generated by construction equipment and associated activities during development of the residential and commercial uses in the Plan Area under this alternative. This impact would be of similar magnitude than that associated with the Proposed Project. As with the project, this impact would be less than significant with Mitigation Measures 4.10-1(a) and (b), requiring dust control and maintenance of construction equipment.

Impacts related to CO at intersections and increased air pollution due to traffic would be slightly lower than those identified under the Proposed Project because the Lower-Density Alternative would generate fewer automobile trips for both Phase I and Full Project. As with the Proposed Project, CO impacts would be less than significant.

Vehicle-related emissions of ozone precursors (ROG and  $\text{No}_x$ ) and  $\text{PM}_{10}$  would be slightly less severe than under the Proposed Project; however, this impact would continue to be significant and unavoidable under Alternative 4. Because Alternative 4 would increase the City's population beyond current projections, like the Proposed Project, there would be a significant and unavoidable inconsistency with Air Quality Attainment Plans.

As with the Proposed Project, exposure of Plan Area residents to odors, toxic air contaminants, and criteria air contaminants from stationary sources would be a less-than-significant impact under Alternative 4.

Because vehicle-related air emissions would be lower, air quality impacts under Alternative 4 would be less severe than impacts under the Proposed Project.

## Noise

Under the Lower-Density Alternative, the impacts related to construction noise, future traffic noise, non-traffic noise and train noise would be similar or identical to those identified for the Proposed Project. Construction in proximity to adjacent residences could create temporary significant and unavoidable impacts.

As with the Proposed Project, traffic noise due to Alternative 4 would be less than significant at offsite receptors because the increases would not exceed 3 decibels, which is the threshold for human hearing. Traffic noise levels for onsite residential uses could exceed City standards under Alternative 4, but Mitigation Measure 4.11-1, which provides for appropriate setbacks and noise barriers would reduce the impact to a less-than-significant level. Residential uses would be located in proximity to non-traffic noise sources, particularly the peaking facility and pump station. With implementation of Mitigation Measure 4.11-2, which provides for sound walls, impacts from stationary noise sources would be less than significant.

Based on the above discussion, the noise impacts of Alternative 4 would be the same as those of the Proposed Project.

## Public Services and Utilities

Because the number of residents would be decreased by 920 under the Lower--Density Alternative, demand for public services and utilities would be decreased in both Phase I and Full Project, relative to the Proposed Project. Individual public service and utility impacts are described below.

### Water

The Lower Density Alternative would have a lower water demand than the Proposed Project, due to the increase in residential units. Under the Low Density Alternative, the average daily demand for Phase I would be 1.44 mgd at buildout, compared with 1.85 mgd for the Proposed Project. When the projections for the existing Light Industrial designation are factored out, the Low Density Alternative would require 0.09 mgd, compared to 0.5 mgd for Phase I of the Proposed Project. The average net water demand for the Full Project would be 1.87 mgd, compared to the Proposed Project's 2.13 mgd. This difference would apply to maximum daily and peak hour flows as well. Similarly, impacts on water treatment and conveyance would be less severe under the Lower-Density Alternative. As with the Proposed Project, the demand for water supply would be less than significant, but would exceed the City's treatment capacity. This impact would be less than significant with implementation of Mitigation Measure 4.12-1, which restricts development until adequate water treatment facilities are available. All other water-related impacts would be less than significant under both Alternative 4 and the Proposed Project.

### Wastewater

Under the Lower Density Alternative, demand for wastewater treatment and conveyance would be slightly lower than under the Proposed Project. The Phase I generation of wastewater would be 1.34 mgd, compared to 1.26 mgd under the Proposed Project, and the Full Project generation would be 2.44, compared to 2.91 under the Proposed Project. The maximums would be slightly lower under the Lower Density Alternative, as well. As with the Proposed Project, the increased demand for wastewater treatment and conveyance would be less than significant because existing and planned facilities are adequate.

### Police and Fire

The Lower Density Alternative would generate a higher demand for police than the Proposed Project, because of the decrease in residential units. Under Alternative 4, approximately 14 additional police officers would be required, as opposed to 15 officers under the Proposed Project. Impacts on fire services would be essentially the same as the Proposed Project. As with the Proposed Project, the impact on police could be reduced to a less-than-significant level with Mitigation Measure 4.12-1, which calls for an increase in the number of police officers. Mitigation Measure 4.12-2, construction of new fire stations, would reduce the impact on fire protection services to a less-than-significant level.



### Solid Waste

The Lower Density Alternative would generate less solid waste than the Proposed Project -- 6,356 tons per year in Phase I and 14,598 tons per year at Full Project, compared with 7,550 tons per year for Phase I of the Proposed Project and 15,792 tons per year for Full Project. As with the Proposed Project, Alternative 4's solid waste generation would be a less-than-significant impact.

### Electricity

The Lower Density Alternative would require 19.4 MW, slightly less electricity than the Proposed Project. This demand could be met by existing and projected electrical supply.

### Natural Gas

The Lower Density Alternative would use slightly less natural gas than the Proposed Project. As with the Proposed Project, this would be a less-than-significant impact, because the amount required, would be well below the unused 109.5 million therms that are allocated to the City.

### Schools

The Lower Density Alternative would generate fewer school children than the Proposed Project. For Phase I, approximately 626 K-6 students and 304 7-8 students would be generated in the Roseville City School District, compared to 775 K-6 and 423 7-8 students under the Phase I of the Proposed Project. For the Full Project, an additional 482 K-5 and 176 6-8 students would attend schools in the Dry Creek Joint Elementary School District, compared to 622 K-5 and 219 6-8 students under the Proposed Project. The number of high school children would also decrease under this alternative to 360 in Phase I and 882 for the Full Project, compared to 448 under Phase I and 971 under the Full Project.

As with the Proposed Project, two elementary school sites and one junior high school would be located in the Plan Area. The General Plan and Specific Plan policies identified in Section 4.12 would reduce this impact to a less-than-significant level.

### Parks

The Lower Density Alternative would generate a demand for 60 acres of parkland in Phase I and 104.5 acres at Full Project. Like the Proposed Project, this alternative provides enough in Phase I (75.7 acres) and the Full Project (104.6 acres) to satisfy City standards. Therefore, demand for parkland would be a less-than-significant impact.

### Libraries

This alternative would create slightly less demand for library space than the Proposed Project, because of the lower number of residents. As with the Proposed Project, this would be a less-than-significant impact.

## CEQA Considerations

The significant irreversible effects of Alternative 4 would be almost identical to the Proposed Project, but of slightly lower magnitude because fewer residential units would be constructed. Significant irreversible effects would include reduction in natural vegetation and wildlife communities, commitment of energy resources, alternation of visual character of the Plan Area, increased use of water, increased air emissions; and the short-term commitment of non-renewable and/or slowly renewed resources such as lumber, water, minerals, and energy, for construction.

Like the Proposed Project, Alternative 4 would extend major infrastructure, including roadways and water and sewer lines, into an area that is undeveloped at present. Development of this infrastructure could be considered growth-inducing because it would remove an existing obstacle (lack of infrastructure) to development. In addition, development of the City's urban reserves could increase pressure to convert other undeveloped areas in the region.

As discussed throughout the above analysis, the impacts of Alternative 4 would be very similar to the Proposed Project, but generally less severe because fewer residential units would be developed. Therefore, cumulative impacts would be similar to the Proposed Project (see Chapter 5.2), but Alternative 4 would generally contribute a smaller portion to cumulative impacts. As with the Proposed Project, significant cumulative impacts would be anticipated for regional flooding, water quality, loss of biological resources, alteration of the visual character of currently undeveloped portions of the city, congestion on local roadways, increased generation of air pollutants, increased demand for water supply, and increased demand for electricity.

### Significant and Unavoidable Impacts

Like the Proposed Project, Alternative 4 would result in the following significant and unavoidable impacts:

- Loss of biological resources,
- Alteration in the visual character of the undeveloped areas,
- Increase in vehicle-generated air emissions,
- Inconsistency with regional air quality plans, and
- Temporary increases in noise due to construction.

Alternative 4 would not result in any significant and unavoidable impacts that would not occur under the Proposed Project.

### **6.3.5 Alternative 5: Off Site Alternative**

One of the requirements of CEQA is the assessment of the comparative environmental impacts of alternative locations for the "project." The situations where alternative locations must be evaluated are governed by the "rule of reason" and have been addressed by the courts.

The most influential case law that provides direction on the inclusion or exclusion of different site alternatives is the December 31, 1990 Supreme Court Decision in Citizens of Goleta Valley



v. Board of Supervisors 52 Cal. 3d 553 (1990 (Goleta II)). In Goleta II, the Supreme Court suggested that the rationale for analysis of alternative sites was tied, in part, to the availability of another site to accommodate the project and to the consistency of the project with the local General Plan. In doing so, the Supreme Court reaffirmed the value of the General Plan as the primary local land use planning tool.

The Proposed Project includes mixed-use development on approximately 1,390 acres. There are few undeveloped areas in or near the City of Roseville that are of this size and close enough to existing or planned infrastructure (e.g., roads, sewer and water lines) to make connections possible without extensions through undeveloped land, which would create new impacts (especially regarding growth-inducement) rather than reduce impacts. Therefore, the only alternative location to be evaluated was the East Area, an Urban Reserve site adjacent to the North Central Roseville Specific Plan, which is almost as large as the Plan Area.

The Off Site Alternative would be located in the "East Area" which comprises the northern and eastern portion of the Northeast Specific Plan Area (see Figure 6-8). The East Area has approximately 1,071 acres that are designated Urban Reserve. While the East Area is smaller than the NRSP area (1,390 acres), this analysis assumes that the Proposed Project could be reconfigured and that the proposed uses could be accommodated in the East Area. Therefore, the number of dwelling units and square footage for commercial and other non-residential uses are assumed to be the same as the Proposed Project.

As with the Proposed Project, the evaluation of Alternative 5 assumes the implementation of City General Plan policies, Improvement Standards and Design Standards.

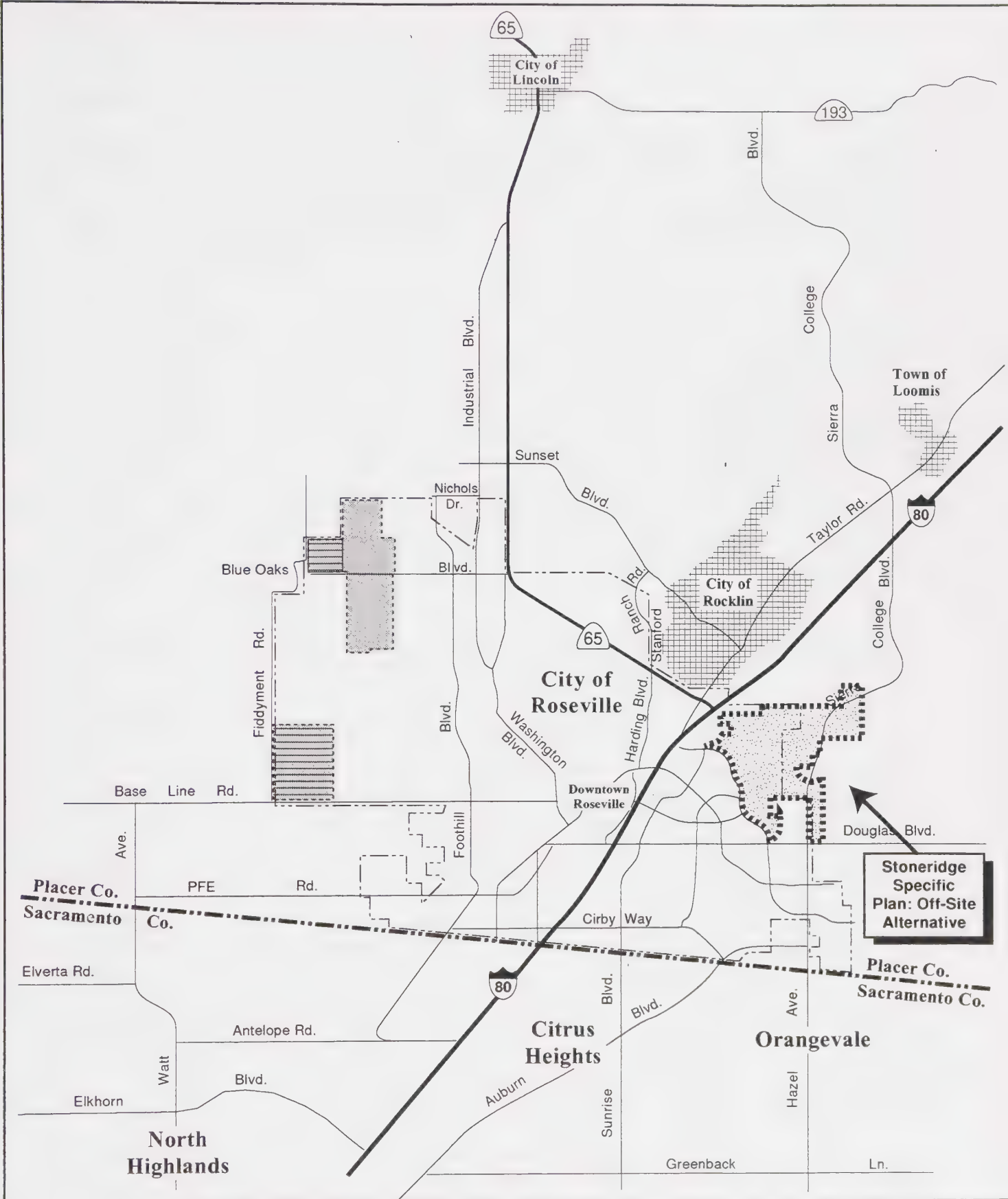
## **Land Use**

The Off Site Alternative is designated Urban Reserve, as is the majority of the Proposed Project site. Like the Proposed Project, conversion of the Off Site Alternative property to the uses proposed in the NRSP would be considered a less-than-significant impact because it would represent a logical extension of existing areas of urban development. Potential conflicts with internal land uses would be the same as the Proposed Project, and would be considered less than significant. Similarly, potential conflicts with adjacent agricultural uses would not be significant, due to compliance with County-required and NRSP buffers between residences and agricultural operations. There are no industrial uses adjacent to the Off Site Alternative, so there would not be any conflicts with those uses. However, there could be other conflicts with adjacent uses, such as the new Roseville Hospital. As with the Proposed Project, these conflicts would be less than significant with implementation of City design standards.

As with the Proposed Project, Alternative 5 would not be expected to result in significant land use impacts. Because Alternative 5 would not create potential impacts between residential and light industrial uses, it would have less severe impacts than the Proposed Project.







|                      |                                                                                                                                                                                                                                                                                                                                                         |  |                                              |  |                               |  |                                               |  |                       |                                                                                            |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------|--|-------------------------------|--|-----------------------------------------------|--|-----------------------|--------------------------------------------------------------------------------------------|
| <p>Scale in Feet</p> | <table border="0"> <tr> <td></td> <td>North Roseville Specific Plan Area (Phase I)</td> <td></td> <td>Off-Site Alternative Location</td> </tr> <tr> <td></td> <td>North Roseville Specific Plan Area (Phase II)</td> <td></td> <td>Roseville City Limits</td> </tr> </table> <p>SOURCE: City of Roseville, February 1995; EIP Associates, May 1997.</p> |  | North Roseville Specific Plan Area (Phase I) |  | Off-Site Alternative Location |  | North Roseville Specific Plan Area (Phase II) |  | Roseville City Limits | <p><b>Figure 6-8</b></p> <p><b>Off-Site Alternative Location</b></p> <p>96063 Regional</p> |
|                      | North Roseville Specific Plan Area (Phase I)                                                                                                                                                                                                                                                                                                            |  | Off-Site Alternative Location                |  |                               |  |                                               |  |                       |                                                                                            |
|                      | North Roseville Specific Plan Area (Phase II)                                                                                                                                                                                                                                                                                                           |  | Roseville City Limits                        |  |                               |  |                                               |  |                       |                                                                                            |





## **Population, Employment and Housing**

Because the land uses assumed for the Off Site Alternative are identical to those identified for the Proposed Project, the same increase in population, housing units and employment would be expected. Therefore, population, employment and housing impacts under Alternative 5 would be identical to the Proposed Project; these impacts would be less than significant.

## **Geology, Soils and Seismicity**

Geologic impacts for the Off Site Alternative would be similar to those of the Proposed Project. Because the population is assumed to be the same for both, risks associated with seismicity would be the same. The soils of the East Area are somewhat different from the Plan Area, primarily because the East Area does not have Cometa Fiddymont Complex soils, which have limited load-bearing capacity and high-shrink swell potential. The East Area also has more topographic variation than the Plan Area, which increases the potential for erosion, landslides and slope instability. In addition, a small area in the northern portion of the East Area site is underlain by Mehrten formation, a volcanic formation that tends to create impervious surface caps. As with the Proposed Project, all geologic and soils constraints impacts could be reduced to less-than-significant levels through compliance with City standards and geotechnical recommendations (Mitigation Measure 4.3-1).

Because the East Area has Mehrten formation and more topographic variation than the Plan Area, the Off Site Alternative would have more severe geologic impacts than the Proposed Project.

## **Hydrology and Water Quality**

Impacts of the Off Site Alternative on flooding, groundwater recharge and water quality would be similar to those of the Proposed Project, because a similar amount of ground disturbance and development of impervious surface would be expected. The Off Site Alternative is located in different watersheds from the Proposed Project, and runoff would enter Cirby Creek and Dry Creek. As with the Proposed Project, onsite detention facilities would be required, along with financial participation in a regional retention project. State and City requirements for stormwater management and water quality controls, including the use of BMPs would need to be implemented. These City and State requirements, along with Mitigation Measures 4.4-1 and 4.4-2, would reduce potential hydrologic and water quality impacts to a less-than-significant level.

Based on the above analysis, the hydrologic and water quality impacts of the Off Site Alternative would be similar to the Proposed Project.

## **Biology**

The East Area site contains a wider variety of natural habitats than the Proposed Project, including non-native grasslands, valley oak riparian woodland, interior live oak riparian woodland, blue oak woodland, and several wetland types (e.g., seasonal wetlands, freshwater marsh, vernal pool, seep, intermittent drainage, and perennial stream). This variety of habitats and the interspersed upland habitat with aquatic, riparian, and wetland habitats, provides forage,

nesting and roosting opportunities, cover, and migratory corridors and an array of wildlife. To some extent, the mitigation measures identified for the Proposed Project would reduce the impacts of the Off Site Alternative. For example, construction protocols (Mitigation Measure 4.5-2) and nesting surveys (Mitigation Measure 4.5-4) would reduce potential construction impacts on biological resources to a less-than-significant level. The preservation and/or recreation of vernal pools, or purchase of mitigation bank credits (Mitigation 4.5-3) would reduce impacts on vernal pools, fairy shrimp and wildlife habitat, but not to a less-than-significant level. Nonetheless, because the Off Site Alternative contains a wider variety of biological habitat, the impacts of this alternative would be more severe than the Proposed Project.

### **Cultural Resources**

A survey performed on the East Area site identified nine historic sites and three prehistoric sites (Fugro West, Inc., 1995). The consultants determined that none of the resources identified were "significant" according to CEQA definitions and that none of the sites are potentially eligible for inclusion in the National Register of Historic Places. However, the State Office of Historic Preservation has not rendered an opinion on these findings. If significant resources are encountered, mitigation similar to that for the Proposed Project (evaluation, preservation or recordation) would reduce the impact to a level that is less than significant, and the impacts of the off-site alternative would be similar to the impacts of the Proposed Project.

### **Aesthetic and Visual Resources**

The Off Site Alternative would be located in the NERSP area, within the City of Roseville, generally at the southeast quadrant of the I-80/SR 65 interchange. The alternative site is of more visual interest and value than the Plan Area and offers foreground views of perennial and seasonal creeks, woodland bluffs, grassland hills with oaks, and riparian woodland, in addition to vernal pools. The alternative site is traversed by three major drainages, Miner's Ravine, False Ravine, and Secret Ravine Creek, as well as numerous smaller drainages. Therefore, the change in existing visual character would be significant and unavoidable, like the Proposed Project, but even more severe. Assuming that the drainages and associated vegetation remained in open space and parks uses, as with the Proposed Project, the loss of riparian vegetation would be less than significant. Impacts resulting from the introduction of light would be less than significant with application of the Community Design Guidelines and the use of "cut-off" light fixtures. The Off Site Alternative would not result in visual incompatibilities between residential and light industrial uses, because the latter are not located adjacent to the Off Site Alternative. These visual incompatibilities would be a less-than-significant impact under the Proposed Project. Because the alternative site has more visual variety, its conversion to urban uses would result in more severe visual impacts than the Proposed Project.

### **Hazardous Materials and Public Safety**

The types of hazardous materials that would be used within the Proposed Project would be the same for the Off Site Alternative, so increased potential for accidental releases and improper disposal of household hazardous wastes would be similar. As with the Plan Area, the Off Site Alternative could have unknown hazards related to past uses, which would be a less than



significant impact with implementation of Mitigation Measure 4.8-1, which requires that hazards be identified and mitigated. Because the Off Site Alternative contains similar terrain to the Plan Area, it would also have an increased risk of fire hazard, which would be reduced to less-than-significant levels with Mitigation Measures 4.8-2(a) and 4.8-2(b). The main difference between the Proposed Project and the Off Site Alternative is that the latter does not have substations and electrical power lines located on it, so there would be less risk of exposure to electromagnetic fields. However, exposure to EMFs was considered a less-than-significant impact even under the Proposed Project.

Based on the above discussion, the impacts of the Off Site Alternative would be slightly less severe than the impacts of the Proposed Project.

### **Transportation and Circulation**

The East Area encompasses most of the area to the north and east of the Northeast Roseville Specific Plan Area, and eastward to the City limits. Under this alternative, the development assumed under the Proposed Project would be allocated to the East Area. The development would be linked to the City's roadway system via two arterials, both of which would connect to Roseville Parkway between Sunrise Avenue and Rocky Ridge Drive.

A traffic analysis of the Off Site Alternative was not conducted for this EIR. However, an analysis of the East Area site for the Highland Reserve North EIR, which had similar types and levels of development, found that there would be a substantial increase in daily traffic volumes on Roseville Parkway, which would result in LOS "D" conditions at the intersection of Sunrise Avenue at Roseville Parkway during the p.m. peak hour. Feasible mitigation measures for this impact would require the addition of triple left turn lanes to westbound Roseville Parkway and northbound Sunrise Avenue. Such improvements may be considered infeasible by the City, which would make this impact both significant and unmitigable. The impact at the intersection of Roseville Parkway and Pleasant Grove Boulevard would continue to be a significant but mitigable impact. Therefore, the alternative would result in a residual potentially significant impact not associated with the Proposed Project.

The demand for transit services and bike facilities would be similar to the Proposed Project. Because development of the Off Site Alternative could result in a significant and unavoidable impact at one intersection, the traffic impacts of the Off Site Alternative would be more severe than the impacts of the Proposed Project.

### **Air Quality**

The Off Site Alternative would entail a level of development similar to the Proposed Project, so construction-related emissions associated with the alternative would be essentially the same as those associated with the Proposed Project. Localized CO concentrations and regional pollutant emissions would be similar in magnitude to those increases generated by the Proposed Project; however, these increases would occur at different locations in Roseville. As with the Proposed Project, increases in CO, criteria pollutants and toxic air contaminants would be less than



significant, while increases in construction emissions and ozone precursors would be significant and unavoidable.

Because construction activities and the number of vehicle trips would be similar, the impacts of the Off Site Alternative would be similar to the impacts of the Proposed Project.

### **Noise**

Under the Off Site Alternative, Phase I and Phase II construction would still take place and conditions would be similar to those of the Proposed Project. Impacts generated from construction noise could be significant and unavoidable for short periods of time.

Peak hour traffic volumes on major roadways such as Douglas Boulevard, Sierra College Boulevard, and Eureka Road would increase proportionately as would traffic volumes on major arterials affected by the Proposed Project site. As with the Proposed Project, traffic volumes on new arterial and collector roadways would also increase proportionately but are not anticipated to be significant. Noise impacts of the Off Site Alternative are expected to be similar to the Proposed Project.

### **Public Services and Utilities**

Land Uses and unit mixes would be similar to the Proposed Project with the Off Site Alternative. The primary difference is that wastewater would flow through Cirby Way sewershed system, which could accommodate this alternative. Demand for other public services and utilities would be identical or similar to the Proposed Project due to the same amount and type of development. As with the Proposed Project, public service and utilities impacts would be significant, or could be reduced to less-than-significant levels with identified mitigation.

### **CEQA Considerations**

The significant irreversible effects of the Off Site Alternative would be almost identical to the Proposed Project, because the levels of development would be identical. Significant irreversible effects would include reduction in natural vegetation and wildlife communities, commitment of energy resources, alternation of visual character of the Plan Area, increased use of water, increased air emissions; and the short-term commitment of non-renewable and/or slowly renewed resources such as lumber, water, minerals, and energy, for construction.

Like the Proposed Project, the Off Site Alternative would extend major infrastructure, including roadways and water and sewer lines, into an area that is undeveloped at present. Development of this infrastructure could be considered growth-inducing because it would remove an existing obstacle (lack of infrastructure) to development. In addition, development of the City's urban reserves could increase pressure to convert other undeveloped areas in the region.

As discussed throughout the above analysis, the impacts of Alternative 5 would be very similar to the Proposed Project. Therefore, cumulative impacts would be similar to the Proposed Project (see Chapter 5.2). As with the Proposed Project, significant cumulative impacts would be

anticipated for regional flooding, water quality, loss of biological resources, alteration of the visual character of currently undeveloped portions of the city, congestion on local roadways, increased generation of air pollutants, increased demand for water supply, and increased demand for electricity. In two areas, the Off Site Alternative's contribution to cumulative impacts would be more severe than the Proposed Project, because the site-specific impacts would be more severe--loss of biological resources and changes in the visual character of the site.

### Significant and Unavoidable Impacts

Like the Proposed Project, Alternative 4 would result in the following significant and unavoidable impacts:

- Loss of biological resources,
- Alteration in the visual character of the undeveloped areas,
- Increase in vehicle-generated air emissions,
- Inconsistency with regional air quality attainment plans, and
- Temporary increases in noise due to construction.

The Off Site Alternative would also result in a significant and unavoidable impact on local roadways, which would not occur under the Proposed Project.

### 6.3.6 Alternative 6: Junction Boulevard Realignment

Under this alternative, the proposed alignment of Junction Boulevard is assumed to be different from that assumed for the Proposed Project. Under the Proposed Project, Junction Boulevard is assumed to be extended from its current terminus just west of Woodcreek Oaks Boulevard a curve southward to intersect with a realigned Baseline Road just east of Fiddymment Road. This is the alignment assumed in the City's 2010 CIP. Under this alternative, Junction Boulevard is assumed to be extended straight to the west to intersect with Fiddymment Road as a "T" intersection. Baseline Road would not be realigned under this alternative. The land use assumptions of the Proposed Project also apply to this alternative; therefore, daily vehicle trip generation is identical.

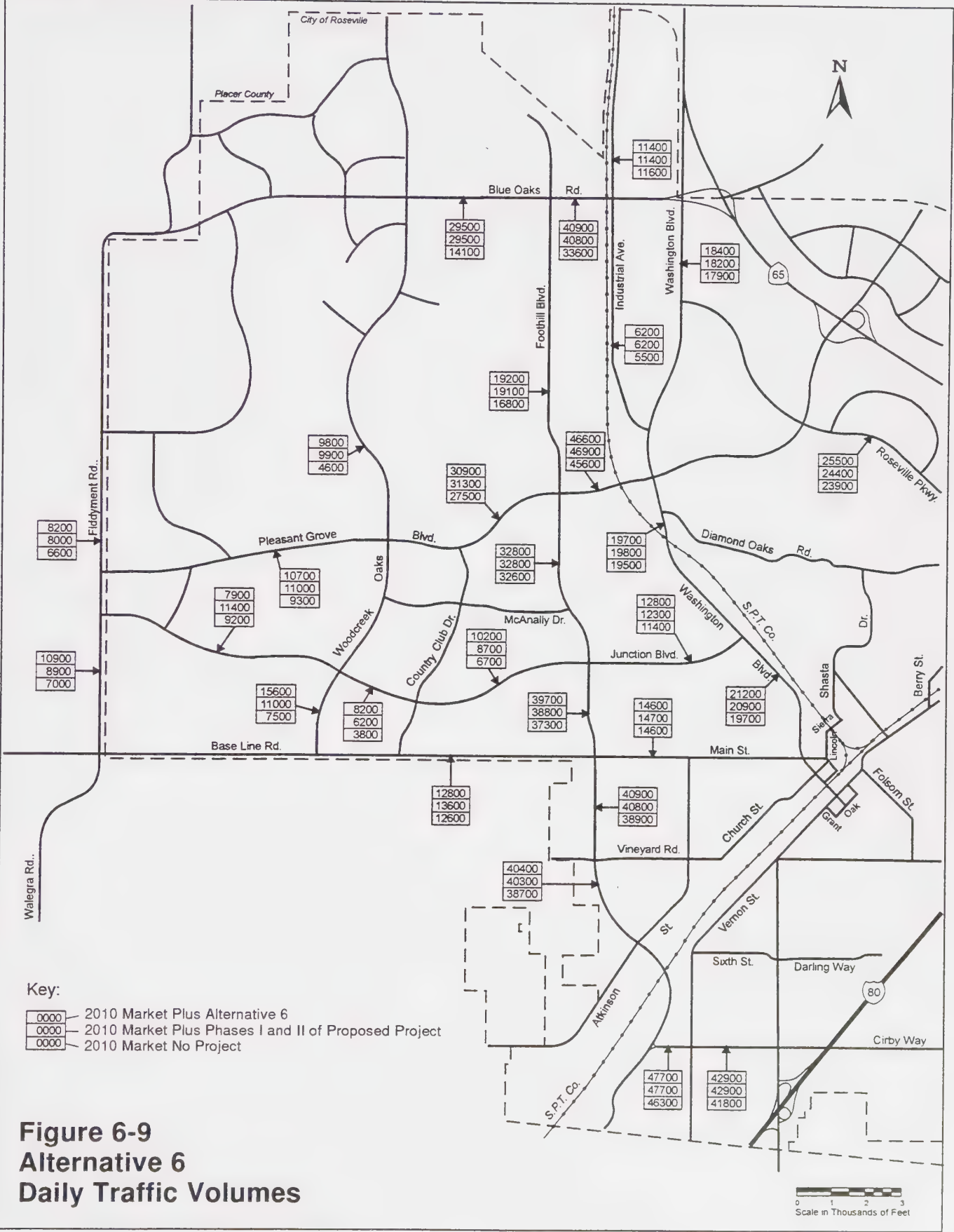
Traffic volumes under this alternative are shown in Figure 6-9. The service levels for the alternative and the Proposed Project are shown in Table 6-5. No transportation-related impacts beyond those discussed under the Proposed Project would occur as a result of this alternative, nor would there be different environmental effects; therefore there is no clear preference between this alternative and the Proposed Project.

### 6.3.6 Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(d)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states that "if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.









**TABLE 6-5**

**NORTH ROSEVILLE SPECIFIC PLAN  
ALTERNATIVE 6  
LEVEL OF SERVICE COMPARISON TO PROPOSED PROJECT  
(FULL PROJECT)**

| <b>Intersection</b>              | <b>Junction Bl. Realignment</b> |            | <b>Proposed Project</b> |            |
|----------------------------------|---------------------------------|------------|-------------------------|------------|
|                                  | <b>LOS</b>                      | <b>V/C</b> | <b>LOS</b>              | <b>V/C</b> |
| Fiddymment at Baseline           | B                               | 0.67       | C                       | 0.77       |
| Baseline at Woodcreek Oaks       | C                               | 0.73       | A                       | 0.58       |
| Fiddymment at Pleasant Grove     | A                               | 0.34       | A                       | 0.33       |
| Woodcreek Oaks at Junction       | A                               | 0.58       | C                       | 0.71       |
| Woodcreek Oaks at Pleasant Grove | A                               | 0.56       | A                       | 0.52       |
| SOURCE: DKS Associates, 1997.    |                                 |            |                         |            |

In the case of this EIR, any of the alternatives that would result in Phase I development alone would be environmentally superior to the Full Project.

Based on a review of the alternatives evaluated in this chapter, Alternative 3 would be considered somewhat environmentally superior to the Proposed Project and the other alternatives (except the No Project alternatives) due to the decrease in traffic-related air emissions, noise, and demand for public services.





---

---

## ***7.0 REFERENCES***

---

---





---

---

## 7. REFERENCES

---

---

### BIBLIOGRAPHY

- Advisory Council on Historic Preservation, *Fact Sheet: Working with Section 106*. Citation from 36 CFR §800.2(e).
- Bolt, Beranek, and Newman. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, U.S. Environmental Protection Agency, December 31, 1971.
- California Department of Fish and Game. Correspondence to Mr. Chris Burrows, City of Roseville, May 25, 1995, from Mr. L. Ryan Broddrick, Regional manager, California Department of Fish and game, 1995.
- California Department of Conservation, Placer County Important Farmland Map 1990, Released March 1992.
- California Department of Transportation CT-EMFAC, *Caltrans Version of EMFAC7F (Version 1.1)*. Caltrans Division of New Technology, Materials and Research, Sacramento. July 12, 1994.
- California Office of Historic Preservation. *Historic Preservation in California: A Handbook for Local Communities*, December 1986.
- California Environmental Protection Agency Air Resources Board Area Designations for State and National Ambient Air Quality Standards, September 1993.
- California Energy Commission. High-Voltage Transmission Lines: Summary of Health Effects Studies. July 1992.
- California EMF Consensus Group, 1992.
- CH2M Hill, Memorandum to the File, *West Roseville Group Preliminary Detention Storage Sizing Draft Summary*, June 28, 1994.
- City of Roseville. *Comprehensive Land Use Element Update Project, Draft EIR*, February, 1995.
- City of Roseville. *Draft West Roseville Baseline Studies*, page 6-9, September 1994.

- City of Roseville. *Draft Environmental Impact Report, Comprehensive Land Use Element Update Project*, February 1995.
- City of Roseville. *Del Webb Specific Plan Draft Environmental Impact Report*, September 1993.
- City of Roseville. *General Plan 2010, Safety Element*, November 1992.
- City of Roseville. *Letter of Promulgation [for Emergency Plan]*, January 13, 1993.
- City of Roseville. *North Central Roseville Specific Plan, Annotated Draft Environmental Impact Report*, SCH # 88053010, 1990.
- City of Roseville. *General Plan 2010*. Adopted November 18, 1992, resolution #92-231, 1994
- City of Roseville General Plan. *Housing Affordable Goal; Affordable Housing Policy HB-3*.
- City of Roseville. *Tree Preservation Ordinance, Chapter 16.10 et seq*, 1994.
- City of Roseville. *List of Numbered General Plan Policies, from General Plan 2010*, Adopted November 18, 1992, Resolution #92-231, 1994.
- City of Roseville. *Preliminary Draft Initial Study for the North Roseville Specific Plan*. April 21, 1995.
- Code of California Regulations (CCR), 1988. California Noise Insulation Standards, California State Building Code (Part 2, Title 24, CCR), Appendix Chapter 35, Sound Transmission Control.
- Coe, T. US ACOE. Letter to Mr. Balfour, Sugnet & Associates Concerning Verification of Wetland Delineation for Roseville 140 Site, Regulatory Section 199400433, September 19, 1994.
- Coe, T. US ACOE. Letter to Mr. Freeman, Sugnet & Associates Concerning Verification of Wetland Delineation for Roseville 140 Site, Regulatory Section 199400433, November 29, 1994.
- Davis, James T. "Trade routes and economic exchange among the Indians of California", edited by Robert F. Heizer. *Ballena Press Publications in Archaeology, Ethnology and History* 3. Ramona, 1974.
- Denny Jones, Director of Facilities Development, Roseville Joint Union High School District, letter to Nela Stewart, Associate Planner, City of Roseville, December 4, 1996.
- Draft West Roseville Baseline Studies, Appendix B, Lithologic Descriptions, September 1994,.

- Environmental Laboratory. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss, 1987.
- EPA. *Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources*. Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, NC, September, 1985.
- Federal Highway Administration. *Report of Field Review - Highway Traffic Noise Impact Identification and Mitigation Decision making Processes*. Office of Environmental Policy. June, 1982.
- Foster, Daniel G. and John W. Foster. "An archaeological reconnaissance of the Roseville - Placer County - Rocklin West sewer assessment district". Ms. on file, North Central Information Center, Sacramento, California, 1981.
- Freed, Stanley A. "Washoe habitation sites in the Lake Tahoe area". In Notes on Western Nevada Archaeology and Ethnology, *University of California Archaeological Survey* 66(3). Berkeley, 1966.
- General Land Office Records, Bureau of Land Management, Sacramento.
- General Land Office Patents.
- Governor's Office of Planning and Research, 1992.
- Harding Lawson Associates. *Preliminary Site Assessment, Phase I - Site History Oak Creek Business Park, Roseville, California*, September 19, 1988.
- Hickman, J.E. (ed). *The Jepson Manual*. University of California Press, Berkeley, 1993.
- Hileman, Bette. "Health Effects of Electromagnetic Fields Remain Unresolved," *Chemical and Engineering News*, November 8, 1993.
- Jennings, M.R. An Annotated Check List of the Amphibians and Reptiles of California. *California Fish and game* 69(3) 151-171, 1983.
- Kleinfelder, Inc. *Second Phase Environmental Assessment, Sammis Roseville Properties, Roseville, California*, March 7, 1988.
- Kroeber, Alfred L. "Handbook of the Indians of California". *Bureau of American Ethnology Bulletin* 78. Smithsonian Institution, Washington, D.C., 1925.
- Lungren, D. Opinion of the Attorney General Concerning the Interpretation of "Harm" and "Take" Under the State Endangered Species Act, No. 94-605, May 15, 1995.



- Mayer, K. E. and W.F. Laudenslayer, Jr. eds. *A Guide to Wildlife Habitats of California*. California Department of Forestry and Fire Protection, 166 pps, 1988.
- Merritt, R.E. and B.J. Schussman. *"Fear of Cancer" EMF Litigation Squelched by Court of Appeal*. In: Environmental Monitor, Spring 1995.
- North Roseville Specific Plan, Administrative Draft, December 1996.
- Pacific Gas and Electric Company. *Public Issue Policy Statement*, Revised, October 1990.
- Peterson, R.T. *A Field Guide to Western Birds*. 3rd ed. Revised. Houghton Mifflin Co, Boston. 432 pp, 1990.
- Phase Three Environmental Management. *Preliminary Site Assessment for the Hewlett-Packard Roseville, California, Facility Expansion Area*, February 1991.
- Placer County Deeds.
- Placer County. *General Plan Update, Draft General Plan Background Report, Volume I*, September 25, 1992.
- Placer County. *General Plan Update, Draft General Plan Background Report, volume II*. September 25, 1992.
- Placer County, *General Plan Update Draft General Plan Update Draft General Plan Countywide General Plan Draft Policy Document*, prepared by Crawford, Multari, and Starr for the County of Placer, October 1, 1993.
- Placer County Planning Dept., Placer County Farmland Designation Map, May 1994.
- Placer County. *Negative Declaration for the Northern California Power Agency Roseville Area Peaking Facility*, June 28, 1984.
- Placer County, *Sunset General Plan*, 1980.
- Public Anthropological Research. "Cultural resource inventory and evaluation of Rich, Shenker, and Carlsberg parcels, Roseville, Placer County, California". Ms. on file, North Central Information Center, Sacramento, California, 1986.
- Raney Geotechnical. *Level I Environmental Site Assessment, Approximate 160-Acre Property APN 017-0110-005, Roseville, California*, January 3, 1994.
- Raney Geotechnical. *Level I Environmental Site Assessment, Approximate 146-Acre Property APN 017-230-09, Roseville, California*, September 24, 1993.

- Resource Management Inc. *City of Roseville Electric Department 230-6--kV Fiddymont Substation Project Initial Study/Negative Declaration*. December 1994.
- Rich Briner, KB Engineering, Surveying, and Planning, memo to Brian Boxer, EIP Associates, June 15, 1995.
- State of California, Government Code Section 65890.1.h.
- California Department of Parks and Recreation. *California inventory of Historical Resources*, Sacramento, 1976.
- California Department of Parks and Recreation. *California Historic Landmarks*. Sacramento, 1985.
- California Office of Historic Preservation. *National Register of Historic Places; annual listing of historic properties: combined listing*, Vol. 1, 1985.
- California Office of Historic Preservation. *National Register of Historic Places: annual listing of historic properties: combined listing*, Vol. 2, 1988.
- Stebbins, R.C. *Western Reptiles and Amphibians*. Houghton Mifflin Company, Boston. 1985.
- Stewart, J., Sugnet & Associates. Correspondence to Mr. Brian Boxer concerning Woodcreek West and Woodcreek North Wetland Mitigation Plans. April 6, 1995.
- Stewart, J., Sugnet & Associates. Correspondence to Mr. Brian Boxer concerning Diamond Creek Wetland Permitting Status, March 29, 1995.
- Stewart, J., Sugnet & Associates. Correspondence to Mr. Brian Boxer concerning Roseville West Group-Walaire 160 April 6, 1995.
- Sugnet & Associates. Wetland Delineation for Woodcreek West, Sares-Regis Group, Roseville California. Prepared for U.S. Army Corps of Engineers, March 9, 1995.
- Sugnet & Associates. Comments Regarding Dames & Moore West Roseville Baseline Studies, September 1994. Prepared for West Side Owners Group October 12, 1994.
- Sugnet & Associates. Special Status Species Assessment for Woodcreek Oaks West, Placer County, California. Prepared for Sares•Regis Group, December 17, 1993.
- Sugnet & Associates. Wetland Delineation for Roseville 140, John Mourier Construction, Inc., Placer Co. Prepared for U.S. Army Corps of Engineers, January 5, 1995.
- Sugnet & Associates. Special Status Species Assessment for Woodcreek Oaks North, Placer County, California. Prepared for Sares•Regis Group, December 17, 1993.

- Sugnet & Associates. Wetland Delineation for Woodcreek North, Sares-Regis Group, Roseville California. Prepared for U.S. Army Corps of Engineers, March 9, 1995.
- Sugnet & Associates. Wetland Delineation for Walaire Property, John Mourier Construction, Inc., Placer County. Prepared for U.S. Army Corps of Engineers, January 5, 1994.
- Sugnet & Associates. Section 404 Regulatory Compliance Pre-discharge Notification, Regulatory Number 199400433, Roseville 140, Mourier Land Investment Corporation, Roseville, California. Prepared for U.S. Army Corps of Engineers, November 2, 1994.
- The Woodcreek Oaks West basins assumed the same type of development in all portions of the property. Depending on locations of park/open space and final grading, there could be a shift in needed storage from one portion to another.
- U.S. Fish and Wildlife Service. Recovery Plan for the Valley Elderberry Longhorn Beetle. 1984.
- USFWS (U.S. Fish and Wildlife Service). Interim Survey Guidelines to Permittees Under Section 10(a)(1)(A) of the Endangered Species Act for the Endangered Species Act for the Endangered Conservancy Fairy Shrimp, Vernal Pool Tadpole Shrimp, and the Threatened Vernal Pool Fairy Shrimp. January 19, 1994.
- VanRemoortere, Mike, Electrical Engineer, Pacific Gas and Electric, May 24, 1991.
- Wade Associates. *Sunset Industrial Area Public Facilities and Services Report*, June 1988.
- Wood densities were derived from Wood Density, *Handbook for Predicting Slash Weight of Western Conifers USFS, Chemical Engineering Handbook, Handbook of Tables for Applied Engineering Science, and Wood Fuel Pamphlet*.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. California's Wildlife, Volume 2, Birds. California Department of Fish and Game, Sacramento, 1990a.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. mayer, and M. White. California's Wildlife, Volume 3, Mammals. California Department of Fish and Game, Sacramento, 1990b.
- U.S. Department of the Interior. 36 CFR Section 60.4. Cited in Advisory Council on Historic Preservation, 1986b.
- Riddell, Francis A. "Maidu and Konkow". In *Handbook of North American Indians* (vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., 1978.
- Thompson & West. *History of Placer County, California, with illustrations and biographical sketches of its prominent men and pioneers*. Thompson & West, Oakland, 1982.



- Wilson, Norman L., and Arlean Towne. "Nisenan". In *Handbook of North American Indians* (vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., 1978..
- Archeo-Tec. "An Archaeological Surface Reconnaissance of the Stanford Ranch West Property, Placer County, California". Ms. on file, North Central Information Center of the California Archeological Inventory, California State University, Sacramento, 1989.
- California Office of Historic Preservation. *National Register of Historic Places: annual listing of historic properties*: combined listing, Vol. 2.
- Crew, Harvey L. "Preliminary Report: 4-PLA-36". In *Archaeological Investigations in the Auburn Reservoir Area, Phase II-III*, edited by E. W. Ritter, pp. 275-280. Ms., National Park Service, San Francisco, 1970.
- Davis, Leonard M. *Roseville, Yesterday and Today: A Pictorial History of the City of Roseville, California from its Earliest Days to the Present*. Roseville Community Projects, Inc., Roseville, 1975.
- Davis, Leonard M. *Profiles Out of the Past, a Biographical History of Roseville, California, From its Earliest Days to the Present*. Roseville Community Projects, Inc., Roseville, 1982.
- Elsasser, Albert B. "The Archaeology of the Sierra Nevada in California and Nevada". *University of California Archaeological Survey Reports* 51:1-93. Berkeley, 1960.
- Elston, Robert G. "A Contribution to Washo Archeology". *Nevada Archaeological Survey Research Papers* 2:1-144. Reno, 1970.
- Elston, Robert G. "The Steamboat Assemblage and its Relationship to the Martis Complex". Paper Presented at the Annual Meeting of the Society for California Archaeology and the Southwestern Anthropological Association, Long Beach, 1972.
- Elston, Robert G., and Jonathan O. Davis. "An Archeological Investigation of the Steamboat Springs Locality, Washoe County, Nevada". *Nevada Archeological Reporter* 6(1):9-14,. Reno, 1972.
- Elston, Robert, and J.O. Davis, A. Leventhal, and C. Covington. "The Archaeology of the Tahoe Reach of the Truckee River". Ms., Tahoe-Truckee Sanitation Agency, Reno, 1976.
- Elston, Robert, and J.O. Davis, and G. Townsend. "An Intensive Archaeological Investigation of the Hawkins Land Exchange Site (FS-05-17-57-33), 4-Nev-184". Ms., Tahoe National Forest, Nevada City, 1976.
- Government Land Office. Plat of Township 11 North, Range 6 East, 1855.

- Gudde, Edwin G. *California Place Names*. University of California Press, Berkeley, 1969.
- Heizer, Robert F., and A. B. Elsasser. "Some Archaeological Sites and Cultures of the Central Sierra Nevada". *University of California Archaeological Survey Reports* 21:1-42. Berkeley, 1953.
- Hoover, Mildred, Hero E. Rensch, and Ethel G. Rensch. *Historic Spots in California* (third edition), edited by William Abeloe. Stanford University Press, Stanford, 1970.
- Jewell, Donald P. "Archaeology of the Oroville Dam Spillway". *Department of Parks and Recreation Archaeological Reports* 10(1). Sacramento, 1964.
- Olsen, William H., and Francis A. Riddell. "The Archeology of the Western Pacific Railroad Relocation: Oroville Project, Butte County, California". *California State Department of Parks and Recreation, Archaeological Reports* 6, 1963.
- Miller, Richard A. *Fortune Built by Gun: The Joel Parker Whitney Story*. The Mansion Publishing Company, Walnut Grove, California, 1969.
- National Park Service. "Guidelines for Applying the National Register Criteria for Evaluation". *National Register Bulletin* 15. U.S. Department of the Interior National Park Service Interagency Resources Division, 1982.
- Ritter, Eric W. "Cultural History of Tie Wiah (4-But-84), Oroville Locality, California". M.A. Thesis, Department of Anthropology, University of California, Davis, 1968.
- Ritter, Eric W. "Northern Sierra Foothills Archaeology: Cultural History and Cultural Process". *University of California, Center for Archaeology Research at Davis, Publications* 2:17-184. Davis, 1970.
- Ritter, Eric W. "The Archaeology of 4-PLA-101, the Spring Garden Ravine Site. In *Archaeological Investigations in the Auburn Reservoir Area, Phase II-III*". Edited by E.W. Ritter, pp. 270-538. Ms., National Park Service, San Francisco, 1970.
- Ritter, Eric W., ed. "Archaeological Investigations in the Auburn Reservoir Area, Phase II-III". Ms., National Park Service, San Francisco, 1970.
- Robinson, W.W. *Land in California*. University of California Press, Berkeley, 1948.
- Wilson, Norman L., and Arlean Towne. "Nisenan". In *Handbook of North American Indians* (Vol. 8), edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C., 1978.
- Guinn, Joseph M. *History of the State of California and Biographical Record of the Sacramento Valley, California*. Chapman Publishing Company, Chicago, 1906.

## PERSONS AND/OR AGENCIES CONTACTED AND/OR CONSULTED

- Anderson, Steve. Hazardous Materials Officer, Roseville Fire Department. personal communication, June 6, 1995.
- Berry, Kirk. Roseville Police Department, Traffic Division, personal communication, June 13, 1995.
- Carman, Jeff. Battalion Chief, Roseville Fire Department, personal communication, June 6, 1995.
- Davies, Roger. Supervising Registered Environmental Health Specialist, Placer County Department of Health & Human Services, Division of Environmental Health, personal communication, June 6, 1995.
- Dry Creek Elementary School District, December 1996.
- Engellenner, Lieutenant Eric. Watch Commander, Placer County Sheriff's Department, personal communication, June 12, 1995.
- Facsimile Transmission from Derrick Whitehead of the City of Roseville Environmental Utilities Department. June 12, 1995, December 1996.
- Garcia, Eric. Department of Toxic Substances Control, Site Mitigation Unit. personal communication, June 15, 1995.
- Gaylord, Garth. Associate Civil Engineer, City of Roseville Public Works Department, personal communication, June 27, 1995, December 1996.
- Gunther, Dee Dee. Administrative Analysis, Roseville Police Department, personal communication, June 12, 1995.
- Hiscox, John. CDFG District Fisheries Biologist, personal communication, June 8, 1995.
- Hobbs, Anne, Placer County Air Pollution Control District, personal communication, May 23, 1995.
- Inouye, G. Arnold. Associate Sanitation Engineer, Central Valley Regional Water Quality Control Board, personal communication, June 9, 1995.
- Jones, Denny. Director of Facilities Development, Roseville Joint Union High School District, personal communication, December 1996.
- Kageta, Grant. Project Manager, Pacific Gas and Electric, personal communication, July 6, 1995.
- Knuthson, Captain Chuck. Roseville Police Department, personal communication, June 12, 1995.



- Luken, Nela, Associate Planner, City of Roseville Community Development Department, December 1996.
- Maxwell, Robert. An Assistant Air Pollution Specialist, California Air Resource Board, personal communication, June 22, 1994.
- Myers, Ron. United States Environmental Protection Agency of the Office of Air Quality Policies and Standards, Emission Inventory Branch, personal communication, Research Triangle Park, North Carolina, April 1, 1995.
- Nickerson, Sue. Director, City of Roseville, Library Department, personal communication, June 8, 1995.
- Roseville City School District, December 1996.
- Roseville Joint Union High School District, December 1996.
- Sharp, Terry. Chief, Roseville Fire Department, personal communication, June 8, 1995.
- Shelton, Lowell. RMI, personal communication, June 5, 1995.
- Stewart, Neila. Environmental Coordinator, City of Roseville Community Development Department, personal communication, June 12, 1995.
- Tahti, Nels. Administrative Analyst, Roseville Fire Department, personal communication, June 9; June 15; June 16, 1995.
- Derrick Whitehead, Director, City of Roseville Environmental Utilities Department, December 1996.
- Letter from Frederic K. Yeager, Planning Director, Placer County Planning Department to Chris Burrows Roseville Planning Department, RE: Notice of Preparation for an Environmental Impact Report for the North Roseville Specific Plan, December 1996.

---

---

## ***8.0 REPORT PREPARATION***

---

---





---

---

## 8. *REPORT PREPARATION*

---

---

### **Lead Agency**

City of Roseville  
Planning Department  
316 Vernon Street, Suite 104  
Roseville, California 95678

Planning Department Staff  
Planning Director  
Principal Planner  
Associate Planner

Patty Dunn  
Dan Dameron  
Nela Luken

### **EIR Authors**

EIP Associates  
1200 Second Street, Suite 200  
Sacramento, California 95814  
(916) 325-4800

Project Manager  
Deputy Project Manager  
Land Use, Planning and Policies  
Population, Employment and Housing  
Soils, Geology, and Seismicity  
Hydrology and Water Quality  
Biological Resources  
Cultural Resources  
Visual Resources  
Hazardous Materials and Public Safety  
Air Quality  
Noise  
Public Services and Utilities  
CEQA Considerations

Brian D. Boxer, AICP  
Adrienne Graham  
David M. Melko  
Tim Raney  
Mary Jane S. Boxer  
Catherine C. McEfee  
E.J. Koford  
Adrienne Graham, Rochelle A. Davisson  
Adrienne Graham, Rochelle A. Davisson  
Alice Tackett  
Rick Veronda, Mike Weber  
Rick Veronda, Mike Weber  
Tim Raney, Pankti Shah  
Brian D. Boxer, Mary Jane S. Boxer,  
Adrienne Graham  
Adrienne Graham

Alternatives

Report Preparation

Emma Gill, Sam Gray

Design/Graphics

Mark S. Biegaj

**EIR Subconsultants**

Transportation

DKS & Associates

John Long

Mark Rackovan

Cultural Resources

Peak & Associates

Melinda S. Peak

---

---

## ***9.0 APPENDICES***

---

---





---

---

***APPENDIX A***  
***NOP AND COMMENT LETTERS***

---

---





***NOTICE OF PREPARATION  
AND INITIAL STUDY FOR THE  
NORTH ROSEVILLE SPECIFIC  
PLAN***

*Prepared for:*

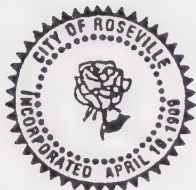
***CITY OF ROSEVILLE***

*Prepared by:*

***EIP Associates***

***November 6, 1996***





PLANNING  
CITY OF ROSEVILLE  
TRADITION • PRIDE • PROGRESS

316 VERNON STREET, SUITE 104 • ROSEVILLE, CA 95678 • PHONE (916) 774-5276

## NOTICE OF PREPARATION

DATE: November 6, 1996

TO: Responsible and Trustee Agencies of California  
Interested Individuals

FROM: City of Roseville  
Planning Department  
316 Vernon Street, #104  
Roseville, CA 95678

SUBJECT: Notice of Preparation for a Draft Environmental Impact Report for the  
North Roseville Specific Plan

The City of Roseville will be the Lead Agency and will prepare an environmental impact report for the North Roseville Specific Plan. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR prepared by the City when considering your permit or other approval for the project.

The project description, location, and the probable environmental effects are contained in the attached materials. A copy of the Initial Study is also attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than thirty (30) days after receipt of this notice. Please send your response to Nela Luken, Associate Planner at the address listed above by December 6, 1996.

Thank you in advance for your prompt response to this Notice of Preparation.

Nela Luken  
Associate Planner

Attachments: Project Description and Location  
Environmental Factors Potentially Affected  
Initial Study





# INITIAL STUDY FOR THE NORTH ROSEVILLE SPECIFIC PLAN

## TABLE OF CONTENTS

|                                                             | <u>Page</u> |
|-------------------------------------------------------------|-------------|
| 1.0 BACKGROUND INFORMATION .....                            | 1           |
| 2.0 PROJECT LOCATION .....                                  | 1           |
| 3.0 INTRODUCTION .....                                      | 3           |
| 4.0 ALTERNATIVES .....                                      | 4           |
| 5.0 EIR SCENARIOS .....                                     | 4           |
| 6.0 PROJECT APPROVALS .....                                 | 5           |
| 7.0 PROJECT SETTING .....                                   | 6           |
| 8.0 NORTH ROSEVILLE SPECIFIC PLAN PROJECT DESCRIPTION ..... | 7           |
| 9.0 INITIAL STUDY CHECKLIST .....                           | 21          |





# INITIAL STUDY FOR THE NORTH ROSEVILLE SPECIFIC PLAN

## 1.0 BACKGROUND INFORMATION

Project Name: North Roseville Specific Plan

Name of Proponent: Wade and Associates for:  
Diamond Creek Partners, Ltd.,  
Eskaton,  
Walaire Inc.,  
Mourier Land Investment Corporation, and  
~~SARES REGIS Group.~~

Proponent Address: 2140 Professional Drive, Suite 140  
Roseville, California 95661

Date Checklist Completed: November 6, 1996

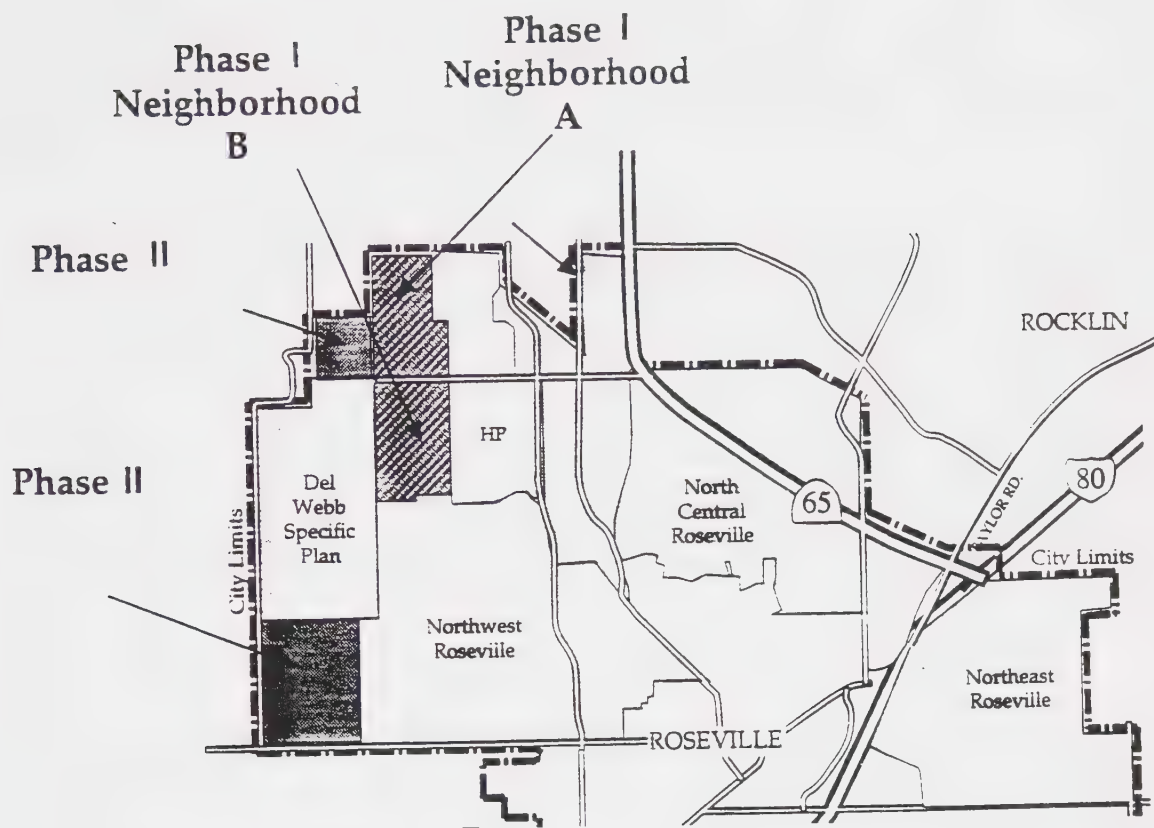
Agency Requiring Checklist: Roseville Planning Department  
316 Vernon Street, Suite 104  
Roseville, California 95678

Project Contact: Nela Luken, Associate Planner  
774-5276

## 2.0 PROJECT LOCATION

The North Roseville Specific Plan is located in Placer County, California along the northern and western boundaries of the City of Roseville (see Figure 1, Regional Location). It consists of a total of 1,374.4 acres. The first phase, consisting of 732.1 contiguous acres of land, is located immediately west of Foothills Boulevard, north of Blue Oaks Boulevard to the city limits and south of Blue Oaks Boulevard to the Woodcreek Oaks Golf Course. The second phase, which is designated Urban Reserve, consists of two discontinuous parcels. The West Urban Reserve area is 160 acres immediately west of the Phase I site. The South Urban Reserve Area is a 482.2-acre site bounded by Del Webb to the north, the Northwest Roseville Specific Plan to the east, Fiddymment Road to the west and Baseline Road to the south. All of the land in the North Roseville Specific Plan Area is currently within the incorporated limits of the City.









The Proposed Project is generally situated six miles west of Interstate 80 (I-80). State Highway 65 (SR 65) provides access from the northwest and intersects I-80 in Roseville. The Proposed Project is approximately one mile west of the Blue Oaks Boulevard interchange on SR 65. Extensions of Blue Oaks Boulevard and Pleasant Grove Boulevard will provide direct access to SR 65.

The North Roseville Specific Plan brings together six properties under five separate ownerships. The ownerships and their related parcels include Diamond Creek Partners, Ltd. (306.9 acres), Eskaton (53.0 acres), Walaire 160 (160.1 acres), Mourier Land Investment Corporation (Roseville 140 - 133.6 acres), and Sammis Roseville Associates (Woodcreek North - 230.9 acres and Woodcreek West- 482.2 acres).

The subject site is known as assessor parcel numbers: Diamond Creek Property (APN 17-110-065), Eskaton (a portion of APN 017-110-065), Walaire 160 (APN 17-110-05), Mourier 140 (APN 17-230-09), and Woodcreek North (APN 017-023-07) and Woodcreek West (APN 017-160-024, 025, 037, 038 and 039).

### 3.0 INTRODUCTION

The North Roseville Specific Plan is one of three Specific Plans under consideration by the City of Roseville; the other two are the Highland Reserve North Specific Plan and the East (Stoneridge) Specific Plan. Each plan area has been divided into two phases, with the initial phase representing the potential number of units that may be available under the current General Plan residential unit allocation. While the entire areas will be comprehensively planned and analyzed, entitlements are being contemplated only for the initial phase of each plan at this time. Consistent with this approach, the North Roseville Specific Plan EIR will evaluate both Phase I and full buildout (Phases I and II combined) of the proposed Specific Plan.

The North Roseville Specific Plan proposes to designate a mix of land uses, including residential, commercial, parks and open space, and schools. The project site is currently used as grazing land. When fully developed, Phase I of the North Roseville Specific Plan will accommodate up to 1,750 dwelling units and 400 senior units<sup>1</sup>; with approximately 5,245 residents. Phase II (Urban Reserve) could eventually provide 2,586 dwelling units with a population of approximately 6,568.

Please see Section 8.0 for a more detailed description of the Project Description (starting on page 7).

---

<sup>1</sup> Not including the 200 assisted living units in Eskaton Village.

## 4.0 ALTERNATIVES

A total of five (5) alternatives will be examined in the North Roseville Specific Plan EIR. The alternatives are anticipated to include the No Project Alternative and at least three on-site alternatives and one off-site alternative. The "No Project" alternative will be described as both a No Development (no development on the project site) and a No Action Alternative (no current action; future development consistent with existing entitlements). Consideration to the following factors will be given during development of the alternatives:

- anticipated significant and/or unavoidable impacts of the proposed project,
- policy direction of the General Plan,
- issues associated with project phasing, and
- alternative sites.

At this time, the anticipated alternatives, in addition to the No Project Alternative are:

- Limited Rezone: This alternative does not change the Light Industrial Zoning on Diamond Creek or Mourier properties and assumes rezone on the rest of the properties within the full project.
- Higher Density Alternative: Higher densities throughout the project area.
- Off-Site Alternative: The same land uses and intensities, but at another location.
- A fifth alternative to be determined.

## 5.0 EIR SCENARIOS

The EIR will address the following five development scenarios:

1. Existing conditions plus buildout of Phase I of the NRSP (Eskaton, Diamond Creek, Woodcreek North and Mourier 140), with undeveloped Phase II of the NRSP (Urban Reserve: Woodcreek West and Mourier 160);
2. Existing conditions plus buildout of Phases I and II (Urban Reserve) of the NRSP;
3. General Plan (2010 Market) plus Phase I of the NRSP and buildout of Phase I of the recently proposed Highland Reserve North (HRN) Specific Plan;
4. General Plan (2010 Market) plus Phases I and II (Urban Reserve) of the NRSP and the Highland Reserve North Specific Plan; and
5. Cumulative (2010 Market/Specific Plan Buildout plus buildout of the Hewlett-Packard Master Plan) plus buildout of Phases I and II of the NRSP and buildout of the proposed HRN and East (Stoneridge) specific plans.



## 6.0 PROJECT APPROVALS

The Project Proponent requests the following approvals for Phase I of the NRSP:

1. General Plan Amendment to change land use from light industrial and urban reserve to low- and medium- density residential, neighborhood commercial and community commercial, business-professional, parks and recreation, open space, and public/quasi-public uses,
2. Amendments to General Plan text and policies,
3. Specific Plan adoption,
4. Rezone from light industrial and urban reserve to uses consistent with the Specific Plan,
5. Large Lot Tentative Map to conform with specific plan parcels,
6. Specific Plan Design Guidelines.
7. Development Agreements,
8. US Army Corps of Engineers Section 404 permit, California Regional Water Quality Control Board Certification, Department of Fish and Game Streambed Alteration Agreements, and State Water Resources Control Board Stormwater Discharge Permit.
9. Annexation of Fiddymment Road adjacent to the project site.
10. Abandonment of a portion of Baseline Road due to realignment.
11. Lot line adjustment to accommodate electric substation adjacent to the project site.

Phase II would require the above approvals, and:

12. General Plan Amendment to increase the City of Roseville's dwelling unit allocation beyond 39,200.

The North Roseville Specific Plan EIR will be the basis for subsequent approvals, including but not limited to subdivisions, use permits, design review, tree permits and other related entitlements.

## 7.0 PROJECT SETTING

The majority of the North Roseville Specific Plan Area is undeveloped annual grasslands. The topography of the site is relatively level with gently rolling hills. There are some dispersed oaks, oak woodlands and riparian creek corridors. The predominant land use is seasonal agricultural grazing.

Cattle and sheep have grazed in portions of the Plan Area for several decades. Numerous ranch buildings are standing on the Diamond Creek property. There are no standing structures on the Walaire 160 (West Urban Reserve Area), Mourier, Woodcreek North, and Woodcreek West (South Urban Reserve Area) properties other than barbed wire fences, a few wooden fence posts, a small dam and 1.4-acre reservoir which is part of a wetlands mitigation area, and high-voltage powerlines crossing the northern portion and the eastern boundary of the South Urban Reserve Area.

The City of Roseville General Plan designates the Walaire 160, Woodcreek North and Woodcreek West properties as Urban Reserve. The Diamond Creek, Mourier and Eskaton properties have a General Plan designation of Light Industrial.

Although classified by the California Department of Conservation (CDC) as Farmland of Local Importance and Grazing Land, the Plan Area is currently used only as seasonal grazing land. None of the properties within the Plan Area are restricted to agricultural uses under the California Land Conservation Act of 1965 (the Williamson Act).

### Surrounding Land Uses

The North Roseville Specific Plan Area is located along the north and west boundaries of the City of Roseville. In the vicinity, numerous residential developments have been completed or are under construction within the Northwest Roseville Specific Plan Area, along Woodcreek Oaks Boulevard and Pleasant Grove Boulevard. Commercial and industrial development, east of the Plan Area, such as the NEC and Hewlett-Packard facilities, Albertsons Distribution Center, and the vacant Lantech Business Park provide some of the major employment in the City.

The City has adopted three existing specific plans which border or are near the Plan Area: the Northwest, Del Webb, and North Central Specific Plans. The Northwest Roseville Specific Plan (NWRSP) was adopted in May 1989 and includes 2,754 gross acres in the western portion of the City generally south and east of the North Roseville Specific Plan Area. Partially developed at present, the NWRSP is expected to accommodate approximately 24,000 residents and provide 4,200 jobs at buildout.

The Del Webb Specific Plan, adopted in December 1993 and currently under construction, is an age-restricted community encompassing 1,200 acres on the northwest side of the City, situated south of Blue Oaks Boulevard and east of the City's western boundary. At full buildout the DWSP will include 3,500 dwelling units and 23 acres of commercial property.

The North Central Roseville Specific Plan (NCRSP) area is generally situated between I-80 and Washington Boulevard, north of the Diamond Oaks Golf Course, and northeast of the North Roseville Specific Plan Area. The NCRSP, adopted in July 1990, is traversed by State Route 65 and incorporates 2,514 acres. At buildout, the NCRSP area is expected to accommodate approximately 12,000 residents and 16,000 jobs.

North of the Plan Area, is the Athens Area, a portion of the Sunset Industrial Area designated Industrial Reserve in the Sunset Community Plan and Business Park/Industrial in the Placer County General Plan. Although the area continues to be predominately agricultural in character, some limited industrial uses have been developed in the area, including a cogeneration facility and landfill.

Two additional Specific Plans have been proposed recently--Highland Reserve North and East Roseville (Stoneridge) Specific Plans. These proposed specific plans are under preparation, along with accompanying environmental documents.

Placer County lands to the west of the specific plan area are designated for agricultural uses under the Placer County General Plan. These agricultural lands are classified by the CDC as Farmland of Local Importance or Grazing Land, with some limited amount of Prime Farmland. The area west of Fiddymont Road, from Baseline Road to Pleasant Grove Creek, and east of the Sutter County line, has been designated a "Future Plan Area" on the Placer County General Plan which identifies this area as "the most appropriate location" for growth beyond that allowed in the County General Plan.

## **8.0 NORTH ROSEVILLE SPECIFIC PLAN PROJECT DESCRIPTION**

The North Roseville Specific Plan is intended to provide comprehensive planning for over 1,000 acres of remaining land in the western portion of the City of Roseville. The Specific Plan provides for development in two phases. Phase I encompasses approximately 732 acres that are currently zoned Residential, Light Industrial and Urban Reserve. Phase II provides plans for approximately 642 acres that are designated Urban Reserve. The Specific Plan addresses all aspects of the Plan Area, including land use, circulation, infrastructure, public services, implementation, and design characteristics.

### **Project Objectives**

The Proposed Project is intended to provide for the orderly and systematic development of a mix of residential neighborhoods, schools, parks and shopping in a manner consistent with the policies of the City and the characteristics and natural features of the land.

Specific objectives identified by the Applicant include:

1. Establish a community that can provide space for the social, recreational, economic, and housing needs of plan area residents.



2. Provide a housing supply near the employment center in the northwest area of the city to enhance the potential for jobs/housing balance and to minimize trip length for home to work commute for employees in the employment center.
3. Provide a mix of housing types and densities that reflect the needs of the community including dwellings affordable to households in a variety of income categories.
4. Provide space for retail and professional services to serve the plan area residents and the general public.
5. Enhance neighborhoods by providing visual and pedestrian links to natural areas and protecting the woodland and creekside environment along Pleasant Grove Creek and its tributaries.
6. Provide a pedestrian and bicycle path system and access to public transit to encourage residents to minimize auto use for shopping, services and leisure activities.
7. Provide a junior high school to house students from the north and west quadrants of the city.
8. Complete the land use and infrastructure planning for the western portion of the city.

### **Phase I Development**

Phase I of the North Roseville Specific Plan encompasses a total of 732.1 acres. The dominant land uses in the rezone area are single-family detached residential homes, open space and recreation uses. The proposed land use allocation is summarized in Table 1, and graphically illustrated on Figure 2, Neighborhood A Land Use Plan, and Figure 3, Neighborhood B Land use Plan.

### **Residential Uses**

Phase I of the North Roseville Specific Plan designates the location of 1,750 dwelling units in a variety of types and densities, as well as 400 Residential Living Units in Eskaton Village, on 472.3 acres. The average density of all land designated for residential use is 4.6 dwelling units per acre (du/ac). The ultimate residential population is estimated to be approximately 5,245 residents, based on an assumed household population of 2.54 persons per household<sup>2</sup> (except in Eskaton Village, Roseville where 1.5 persons per household was assumed for independent living units and 1.0 persons per unit was assumed for assisted living units).

Of the total number of dwelling units, ten percent are planned to meet pricing criteria for low or middle income households, as set forth in the General Plan. The affordable dwelling units are to be designated in each neighborhood in order to achieve a distribution throughout the Plan

---

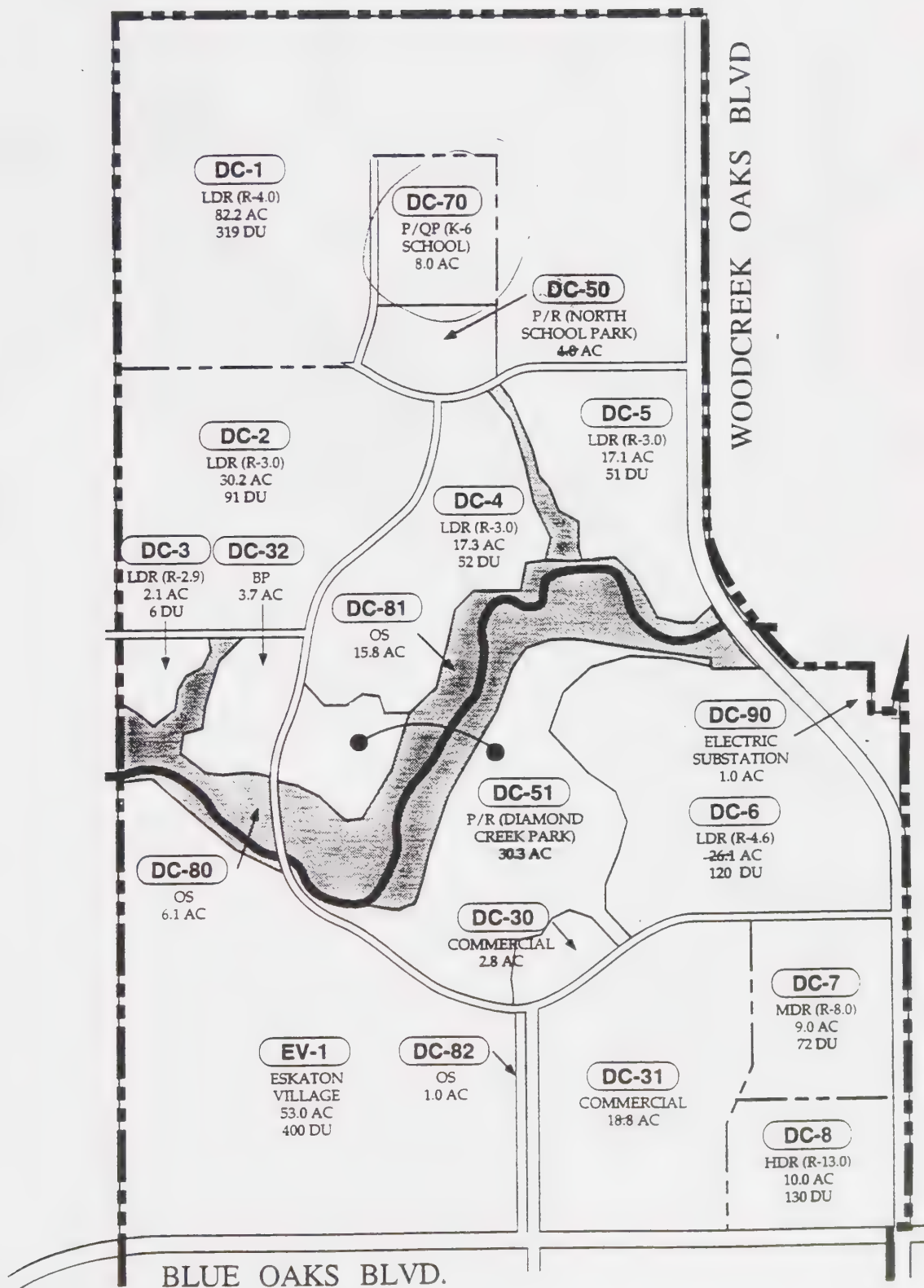
<sup>2</sup> City of Roseville, Roseville General Plan Housing Element, "Summary of Population and Housing Characteristics", page X-5, 1992.

**TABLE 1**  
**NORTH ROSEVILLE SPECIFIC PLAN**  
**LAND USE ALLOCATION**

| Land Use                                                                                                                                                                                          |                | Phase I                                   | Phase II        | Total                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------|-----------------|-------------------------------------------|
| <b>Residential Uses</b>                                                                                                                                                                           |                |                                           |                 |                                           |
| R-1 (LDR)                                                                                                                                                                                         | Acres<br>Units | 396.8<br>1490.0                           | 385.8<br>1842.0 | 782.4<br>3332.0                           |
| R-1 (MDR)                                                                                                                                                                                         | Acres<br>Units | 9.0<br>72.0                               | 34.4<br>298.0   | 48.4<br>450.0                             |
| R-1 (HDR)                                                                                                                                                                                         | Acres<br>Units | 13.5<br>188.0                             | 22.3<br>446.0   | 30.8<br>546.0                             |
| Eskaton Village Units<br>(Independent Living) <sup>1</sup>                                                                                                                                        |                | 53.0<br>400.0                             | 0.0<br>0.0      | 53.0<br>400.0                             |
| (Licensed Care)                                                                                                                                                                                   |                | 200.0 <sup>2</sup>                        | 0.0             | 200.0                                     |
| Total Residential                                                                                                                                                                                 |                | 472.3 <sup>2</sup><br>2150.0 <sup>3</sup> | 442.5<br>2586.0 | 914.6 <sup>2</sup><br>4736.0 <sup>3</sup> |
| Community Commercial (CC)                                                                                                                                                                         |                | 37.4                                      | 6.0             | 43.4                                      |
| Business Professional (B-P)                                                                                                                                                                       |                | 3.7                                       | 0.0             | 3.7                                       |
| 7-8 School (P/QP)                                                                                                                                                                                 |                | 22.7                                      | 0.0             | 22.7                                      |
| K-6 School (P/QP)                                                                                                                                                                                 |                | 18.0                                      | 10.0            | 28.0                                      |
| School Administration (P/QP)                                                                                                                                                                      |                | 0.0                                       | 3.6             | 3.6                                       |
| Park (P/R)                                                                                                                                                                                        |                | 88.0                                      | 29.7            | 117.7                                     |
| Open Space (OS)                                                                                                                                                                                   |                | 64.7                                      | 115.5           | 181.7                                     |
| Fire Station                                                                                                                                                                                      |                | 0.0                                       | 1.5             | 1.5                                       |
| Right-of-Way/Electric Substation                                                                                                                                                                  |                | 25.3                                      | 33.7            | 59.0                                      |
| Total Plan Acreage                                                                                                                                                                                |                | 732.1                                     | 642.5           | 1374.4                                    |
| Total Units                                                                                                                                                                                       |                | 2150.0                                    | 2586.0          | 4736.0                                    |
| <sup>1</sup> Eskaton also includes licensed care and associated services.<br><sup>2</sup> 419.3 acres without the 53.0 acre Eskaton Village.<br><sup>3</sup> 1,750 without Eskaton Village units. |                |                                           |                 |                                           |
| SOURCE: Wade and Associates, 1996.                                                                                                                                                                |                |                                           |                 |                                           |



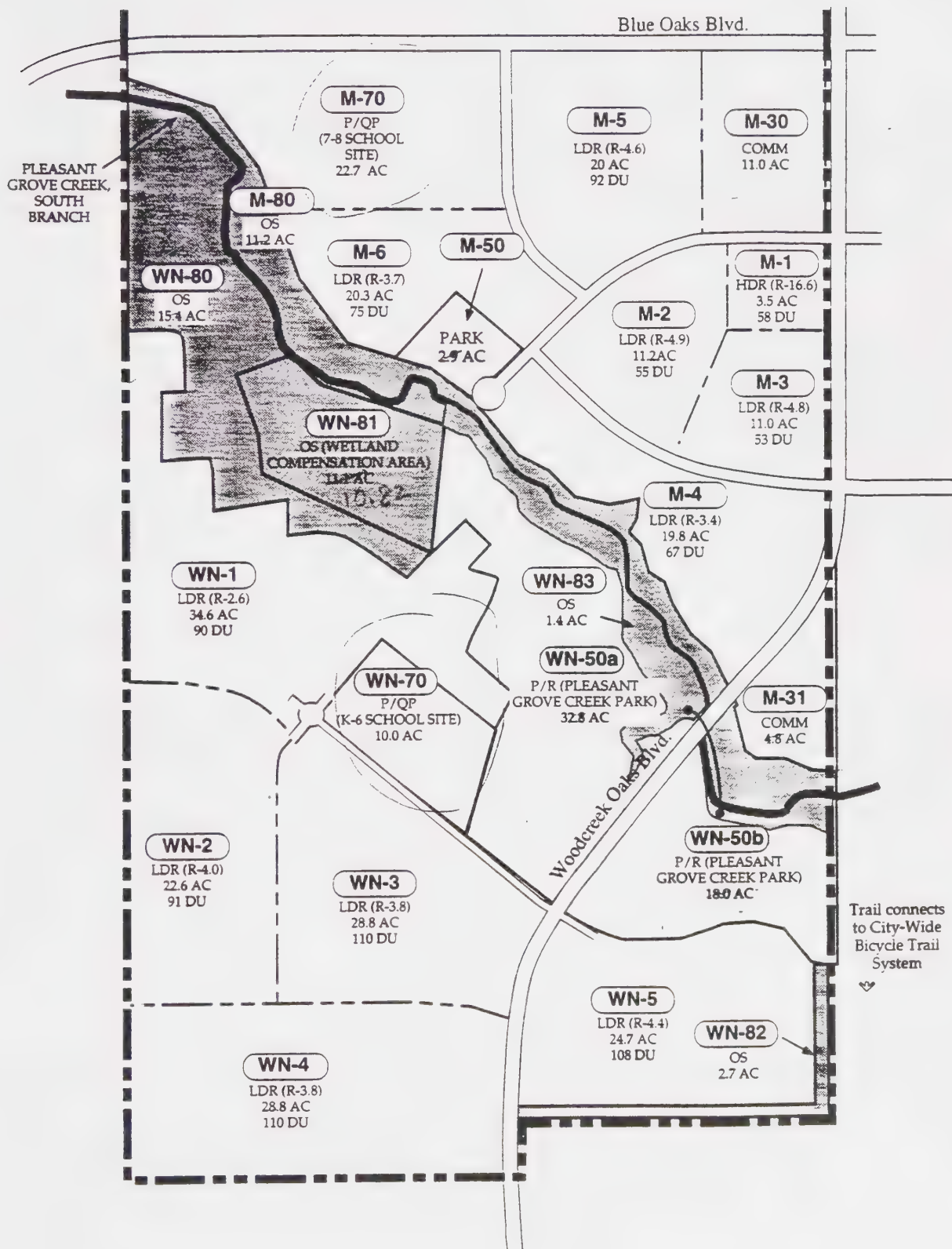




Source: Wade Associates, October 2, 1996

Figure 2 Neighborhood A Land Use Plan





Source: Wade Associates, October 2, 1996





Area. Approximately one-quarter (25%) of the affordable units would be ownership residences affordable to middle income households, and approximately three-quarters (75%) of the affordable units would be ownership and multi-family rental units affordable to low income households.

The 53-acre site on Blue Oaks Blvd. is designated for Eskaton Village, Roseville. Eskaton Village, Roseville is intended to be a senior housing development, designed for those transitioning to, or in need of, some level of assisted living or continuing care. The Eskaton Village, Roseville will provide approximately 400 independent living cottages and apartments, as well as 200 assisted living units. Continuing care may also be provided in a skilled nursing facility.

### **Commercial Land Uses**

The Community Commercial land use will provide a mix of shops and services to meet the daily shopping needs of the residents and employees in the plan area. Typical uses permitted within the Commercial land use include, but are not limited to grocery stores, retail stores, banks, restaurants, bakeries, business colleges, music and dance studios, professional offices, public utility offices, and gas stations.

In Neighborhood "A" there are two Community Commercial sites located north of Blue Oaks Boulevard for a total of 21.6 acres. In Neighborhood "B" there is a total of 15.8 acres designated for Community Commercial uses.

### **Business-Professional Land Uses**

The Business-Professional land use is intended to provide a flexible mix of uses not usually found in a conventional office or commercial setting. In the Business-Professional land use small professional offices may be mixed with specialty retail, restaurants, or other commercial uses. Typical uses permitted within the Business-Professional land use include medical, dental and general offices, professional services, restaurants and hotels, financial institutions, bakeries and groceries, hairdresser and related services, and specialty retail stores.

One Business-Professional site is located in Neighborhood "A", north of the Pleasant Grove Creek.

### **Open Space Land Uses**

Approximately 152.7 acres within the Phase I area will be in parks and open space uses, in a variety of forms including parks, pedestrian promenades, preserves, creek corridors, and landscape corridors. The open space areas within the Plan Area are intended to serve a variety of functions, including stormwater detention, programmed and unprogrammed recreation (such as nature preserves, linear parkways, neighborhood parks, community gardens, school play areas, creek corridors, and landscaped corridors), and components of a trail system allowing residents to jog, bike, or walk throughout the Plan Area via connections between the two neighborhoods.

## **Phase II Development**

Phase II land use designations are shown in Figure 4, West Urban Reserve Land Use Plan, and Figure 5, South Urban Reserve Land Use Plan. Acreages are presented in Table 1. It should be noted that Phase I could be developed independent of Phase II.

### **Residential Uses**

Phase II of the North Roseville Specific Plan designates the location of 2,586 dwelling units in a variety of types and densities. The ultimate residential population is estimated to be approximately 6,568 residents, based on an assumed household population of 2.54 persons per household.

### **Commercial Land Uses**

One 6-acre site in the South Urban Reserve Area is designated for Commercial uses. The site is located south of Pleasant Grove Blvd. and east of Fiddymont Road.

### **Open Space Land Uses**

Within Phase II, approximately 146.7 acres will be designated as parks or open space, which comes in a variety of forms and includes parks, pedestrian promenades, park preserves, creek corridors, and landscape corridors.

## **Circulation**

The circulation system in the Plan Area would use the basic road system identified in the City of Roseville General Plan and would provide opportunities for residents to reduce automobile use by reducing the need for some daily trips and providing alternative modes of transportation. The need for vehicle trips is intended to be reduced by the organization of land uses and the strategic placement of facilities so that residents can walk or bicycle for many trips that might otherwise be taken by automobile.

The North Roseville Specific Plan circulation system is intended to participate in the completion of the General Plan circulation system by extending and connecting planned roads. By completing the network of existing and planned arterial roads, the Plan anticipates a grid system that would channel traffic in a northeast direction toward Highway 65 and, ultimately, Interstate 80.

The North Roseville Specific Plan provides routes that would accommodate alternative vehicles, primarily envisioned as small electric-powered vehicles. In addition, the Specific Plan includes a Primary Bikeway/Pedestrian Pathway system independent of the regular street system, as well as a Secondary Bikeway System which would be incorporated into the regular street system.

It is proposed that Roseville Urban Shuttle (RUSH) and Roseville Area Dial-a-Ride (RADAR) be expanded to the Plan Area as demand for these services occurs and funds become available.



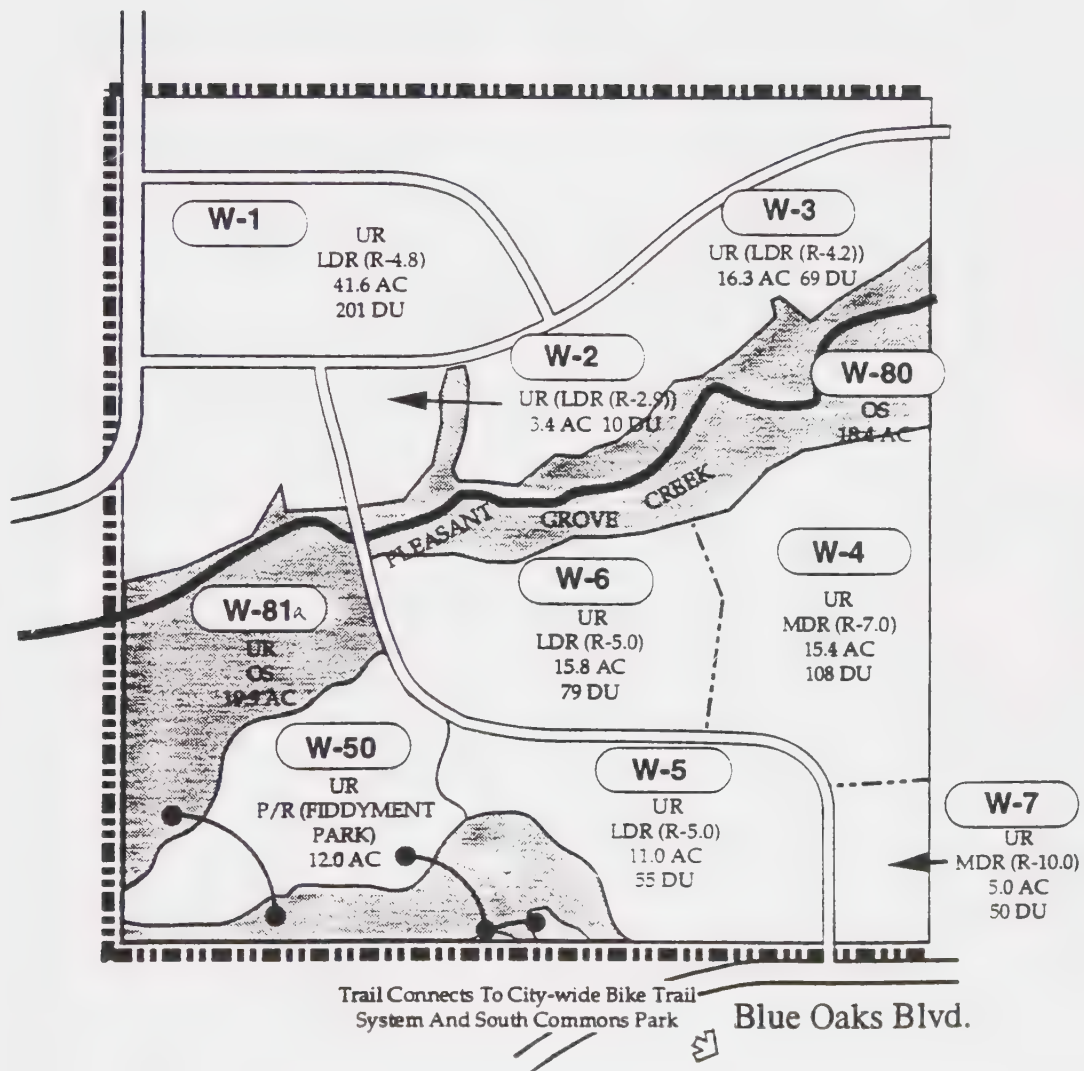
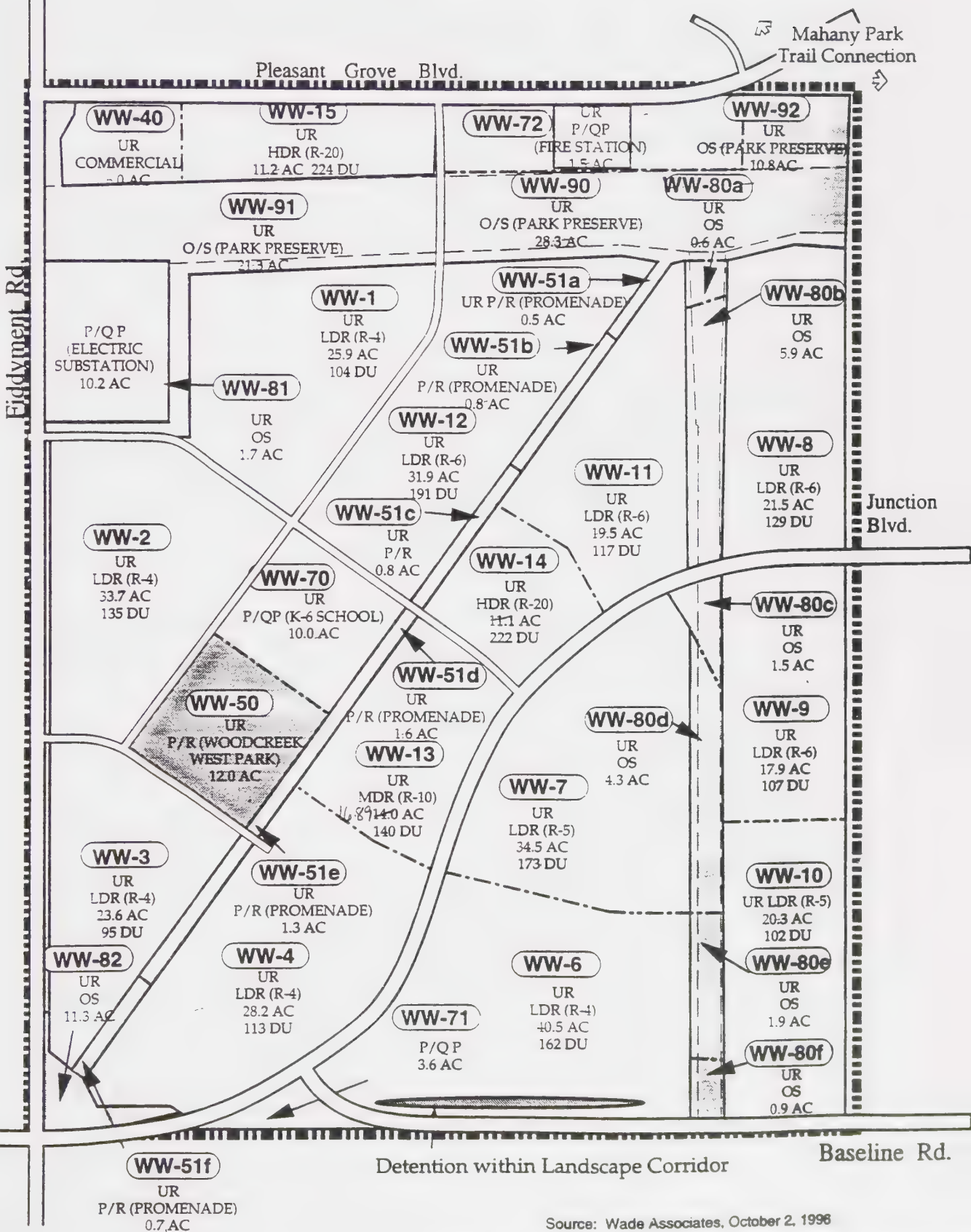


Figure 4 West Urban Reserve Land Use Plan

Source: Wade Associates, October 2, 1996





Source: Wade Associates, October 2, 1996





The Specific Plan proposes a design that could accommodate light rail in a route along Roseville Parkway and Blue Oaks Blvd.

Employers within the Plan Area would be required to comply with the City of Roseville's TSM Ordinance, originally adopted in 1983 and revised in January 1991, which requires companies with more than 50 employees to prepare a TSM plan that promotes use of alternative modes of transportation, including public transit and carpool/vanpools.

### **Resource Management**

The Resource Management Element of the Specific Plan is intended to ensure that the natural resources of the Plan Area are conserved and that the impacts associated with urban development are mitigated to the extent possible.

#### **Wetlands**

A variety of types of wetlands occur within the Plan Area. The Proposed Project would avoid some vernal pools and other wetlands; however, full development would result in the need to "fill" a portion of the wetlands and, thus, will require a permit issued by the Corps pursuant to Section 404 of the Clean Water Act. Permits have been secured for the Diamond Creek and Eskaton properties, and have been submitted for the Woodcreek north and Woodcreek West properties. No application has been made for the Mourier 140.

#### **Oak Woodlands**

The Proposed Project land uses have been configured to retain a majority of the existing oak woodlands by designating the creek corridors in open space. Some tree removal may be necessary to accommodate road crossings, pathway crossings, and linear trails. Removal of native oak trees would be subject to approval of a tree permit by the City.

#### **Water Quality**

The Proposed Project would incorporate a system to control post-construction stormwater pollution. Natural drainage swales would enhance water quality by incorporating settling basins, rock energy dissipaters, and biological treatment. Grassy swales would be used to convey runoff to either a stabilized channel or into another facility (i.e. detention pond, constructed wetland).

#### **Water Conservation**

A potable water system would be developed in the Plan Area. If available, reclaimed water may be used to irrigate landscape medians, parks, and other public areas to the extent permitted by law.

## **Public Facilities and Services**

The Proposed Project provides for a variety of public facilities and services, including schools, parks, police and fire protection, electric utilities, water facilities, sewer system, and storm drainage system.

### **Water**

The Proposed Project intends to connect directly to the existing water system infrastructure on the west side of the City of Roseville and to connect to the existing intertie with the PCWA system.

### **Reclaimed Water**

The Proposed Project allows for the use of reclaimed wastewater for irrigation of landscape corridors and medians, parks, and other common area landscaping. Reclaimed water may be conveyed through the existing wastewater transmission line adjacent to Woodcreek Oaks Blvd. after alternative wastewater lines are constructed.

### **Wastewater**

The Plan Area would be served by the Roseville Regional Wastewater Treatment Plant on Dry Creek at the end of Booth Road, and all sewer improvements would be required to be consistent with the Regional Wastewater Master Plan.

### **Storm Drainage and Flood Control**

The Plan Area is located in the watershed of Pleasant Grove Creek and the South Branch of Pleasant Grove Creek. Proposed Project improvements to the drainage system may include rechannelization of minor tributaries, construction of pipe conveyance systems, construction of culverts and bridges, development of stormwater water quality treatment facilities, and construction of facilities intended to detain peak flows. On-site detention may occur at various locations throughout the Plan Area.

### **Solid Waste Disposal**

Except where provided to non-residential uses by private companies, the City of Roseville would provide disposal service to the Plan Area. Solid waste would be transported and disposed of at the Western Regional Landfill facility, located at Fiddymment Road and Athens Road. Recycling collection facilities would be located in each neighborhood in the Community Commercial or Business-Professional sites.

### **Police Protection**

The Roseville Police Department would provide police protection services to the Plan Area.



## **Fire Protection**

One new fire protection facilities has been identified in Phase II of the North Roseville Specific Plan.

## **Parks and Recreation**

The North Roseville Specific Plan proposes a total of five park sites in Phase I, which total 88 acres. In addition, Phase I of the plan proposes approximately 64.7 acres as open space, much of which is intended to preserve wetland resources and floodplains, and which will provide some passive recreational opportunities. Phase II of the plan proposes 29.7 acres of park and 115.5 acres of open space.

## **Schools**

Two elementary schools and a junior high school are planned for Phase I, comprising a total of 40.7 acres of land. All three schools will be operated by the Roseville City School District. In addition, the Plan Area would be served by Buljan Intermediate School located on Washington Blvd., and Woodcreek High School located on Woodcreek Oaks Blvd.

For Phase II, a 10-acre elementary school site is proposed in the South Urban Reserve area. This school would be in the Dry Creek Joint Elementary School District.

The Roseville City School District has identified the need for a continuation high school; such a school may be included in the Plan Area or elsewhere in the City.

## **Library**

No new library facilities are identified as part of the Proposed Project. Library services to residents of the Plan Area could be provided by expansion of the planned Mahany Park facility or construction of a new branch in the Plan area.

## **Utilities**

### Electric Service

The Roseville Electric Utility Department would supply electricity to the Plan Area. The Roseville Electric Master Plan calls for construction of a pair of 60-kV lines located within Woodcreek Oaks Blvd. and on the east side of Fiddymment Road. Actual location of the lines will be determined at a later date.

The City's Electric Department is planning to connect the existing 60-kV lines north of the Plan Area south along Roseville Parkway and west along Blue Oaks Blvd, or north on Woodcreek Oaks Boulevard and then west along Nichols Road.

An electrical receiving station is located south of Pleasant Grove Boulevard and east of Fiddymment Road. An additional substation is planned north of Blue Oaks Boulevard and east of Roseville Parkway.

### *Street Lighting*

Street lighting would be provided along all roadways in the Plan Area, at intervals in accordance with City policy.

### *Natural Gas*

Natural gas would be provided by Pacific Gas and Electric Company.

### *Cable Television*

Cable television service to the Proposed Project would be provided by a vendor, likely Jones Intercable.

## **Off-Site Improvements**

Development of the Specific Plan will require the extension of off-site facilities to provide water, sewer and other services to the project site. The EIR will address the potential effects of off-site improvements that are directly related to the Specific Plan. At this time, it is anticipated that off-site improvements will include a water transmission line along Blue Oaks Boulevard to Industrial Boulevard, the relocation of planned 60-kV lines, an electrical substation immediately east of the Diamond Creek parcel, and drainage facilities that will accompany road widenings.

## **Implementation**

### **Development Agreements**

The Proposed Project is intended to be implemented through a series of development agreements executed between the City of Roseville and the individual landowners within the Plan Area, in accordance with the City of Roseville Zoning Ordinance. The agreements would be binding contracts between the City and the landowners which set the terms, conditions, rules, regulations, entitlement, vested rights, and other provisions relating to development of the Plan Area. The development agreements are intended to be subject to the provisions of the proposed North Roseville Specific Plan. Included in the development agreements would be provisions related to infrastructure improvements, public dedication requirements, landscaping amenities, and other obligations of the parties. Development agreements typically run for a period of 20 years, run with the property, and may only be modified by mutual consent of the City and the landowner.

### **Zoning**

All lands within the Plan Area would be zoned consistent with the zoning classifications of the Roseville Zoning Ordinance.

### **Subsequent Entitlement**

Development within the Plan Area would be subject to approval of subsequent entitlement by the City in accordance with the Zoning Ordinance and Roseville Municipal Code. Subsequent approvals may include subdivision maps, tree permits, design review and use permits.

### **Financing of Public Improvements**

The development of the public improvements necessary to serve the residents and businesses within the Proposed Project would be funded through a variety of means. The specific method of financing would be established in individual development agreements between the City and each landowner.



## 9.0 INITIAL STUDY CHECKLIST

The following checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by the project. Explanations to all answers are provided as necessary.

For this checklist, the following designations are used:

**Potentially Significant Impact:** An impact that could be significant, and for which no mitigation has been identified. Potentially significant impacts will be addressed in the EIR.

**Potentially Significant Unless Mitigation Incorporated:** An impact that may require mitigation to be reduced to a less-than-significant level. These impacts, along with appropriate mitigation, will be evaluated in the EIR.

**Less-Than-Significant Impact:** Any impact that would not be considered significant under CEQA relative to existing standards. These impacts will be addressed in the EIR if additional information is needed to substantiate the finding of "less than significant."

**No Impact:** The project would not have any impact, so the issue will not be addressed in the EIR.

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact | No<br>Impact             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------------------|
| I. LAND USE AND PLANNING. <i>Would the proposal:</i>                                                                                                                                                                                                                                                                                                                                                       |                                      |                                                                    |                                    |                          |
| a) Conflict with general plan designation or zoning?                                                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Implementation of the proposal would result in an amendment to the Roseville General Plan and a change in the existing zoning in the Urban Reserve and Light Industrial portions of the North Roseville Specific Plan Area. These changes would alter existing land use plans by changing lands currently planned for industrial uses, or identified as urban reserve, to residential and supporting uses. |                                      |                                                                    |                                    |                          |
| b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?                                                                                                                                                                                                                                                                                        | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| See I.a), above.                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                                                    |                                    |                          |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| c) Be incompatible with existing land use in the vicinity?                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| <p>Implementation of the proposal would result in the development of residential neighborhood in close proximity to light industrial uses, and close to potential nuisances such as high power transmission lines. The proximity of homes and apartments to these other types of uses could result in incompatibilities between adjacent uses. A potentially significant impact could occur unless the proper mitigation is implemented.</p>                                                                                             |                                      |                                                                    |                                    |                                     |
| d) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?                                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| <p>The Proposed Project would convert undeveloped lands, some of which are used for cattle and sheep grazing purposes, to urban uses. This would result in the loss of these lands for grazing purposes. This land is not irrigated, is not considered Prime Farmland, and is used only seasonally. However, adjacent agricultural operations could be affected by the Proposed Project, due to nuisance complaints from project residential uses unless proper mitigation is implemented.</p>                                           |                                      |                                                                    |                                    |                                     |
| e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| <p>The Proposed Project would be developed on lands that are currently undeveloped, and do not include any established community. Implementation of the proposal would have no impact on the physical arrangement of any community within the City of Roseville.</p>                                                                                                                                                                                                                                                                     |                                      |                                                                    |                                    |                                     |
| <p>II. POPULATION AND HOUSING. <i>Would the proposal:</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |                                                                    |                                    |                                     |
| a) Cumulatively exceed official regional or local population projections?                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input type="checkbox"/>            |
| <p>With Phase II, the Proposed Project would increase the number of available housing units available in the City of Roseville beyond those identified in the General Plan, and as such, the residential component would stimulate population growth beyond that anticipated in planning projections. The non-residential component of the Proposed Project would be resident-accommodating (i.e., schools, parks, commercial) and would not serve as a major job-generation center. Phase I alone would not generate these impacts.</p> |                                      |                                                                    |                                    |                                     |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                                     | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| b) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?                                                                                                                                                                                                                                                                     | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| <p>The proposal would allow urban development in the Plan Area which is currently undeveloped and unpopulated. Although the proposal represents planned development between the existing urbanized area and the recently approved Del Webb Specific Plan Area, inducement of growth beyond that in the Plan Area is possible due to extension of urban service and the arterial roadway system to the existing city limits.</p> |                                      |                                                                    |                                     |                                     |
| c) Displace existing housing, especially affordable housing?                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <p>Implementation of the proposal would not affect any existing housing conditions. There are currently no occupied homes located on the site.</p>                                                                                                                                                                                                                                                                              |                                      |                                                                    |                                     |                                     |
| <p>III. GEOLOGIC PROBLEMS. <i>Would the proposal result in or expose people to potential impacts involving:</i></p>                                                                                                                                                                                                                                                                                                             |                                      |                                                                    |                                     |                                     |
| a) Fault rupture?                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <p>No known geologic faults exist on the site.</p>                                                                                                                                                                                                                                                                                                                                                                              |                                      |                                                                    |                                     |                                     |
| b) Seismic ground shaking?                                                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>No geologic hazards have been identified on the site. Development of the site would result in an increase in the number of persons and property which could be affected by regional geologic activity.</p>                                                                                                                                                                                                                   |                                      |                                                                    |                                     |                                     |
| c) Seismic ground failure including liquefaction?                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>No geologic hazards have been identified on the site. Development of the site would result in an increase in the number of persons and property which could be affected by regional geologic activity.</p>                                                                                                                                                                                                                   |                                      |                                                                    |                                     |                                     |
| d) Seiche, tsunami, or volcanic hazard?                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <p>No volcanic activity has been identified on or near the project site. Due to the Proposed Project location and regional climate conditions of the area, no lake or other surface water body exists in which a seiche or tsunami could directly or indirectly affect the site.</p>                                                                                                                                            |                                      |                                                                    |                                     |                                     |



| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| e) Landslides or mudflows?                                                                                                                                                                                                                                                                                 | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Development of the site would require removal of some vegetation which could result in exposure of the site to increased incidence of erosion, however limited slopes or topographical changes on the site make the potential for landslides or mudflow hazards very low.                                  |                                      |                                                                    |                                     |                                     |
| f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?                                                                                                                                                                                                           | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Grading and excavation will be required for the Proposed Project. Therefore, there is a potential for the creation of unstable soil conditions or changes in the topography of the area.                                                                                                                   |                                      |                                                                    |                                     |                                     |
| g) Subsidence of the land?                                                                                                                                                                                                                                                                                 | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| As currently proposed, the project would not involve any substantial requirement of short- or long-term dewatering. Therefore, subsidence would not occur in the Plan Area.                                                                                                                                |                                      |                                                                    |                                     |                                     |
| h) Expansive soils?                                                                                                                                                                                                                                                                                        | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Soils in the vicinity of the Plan Area are known to have high shrink-swell potential.                                                                                                                                                                                                                      |                                      |                                                                    |                                     |                                     |
| i) Unique geologic or physical features?                                                                                                                                                                                                                                                                   | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| No unique geologic or physical features currently exist in the Plan Area.                                                                                                                                                                                                                                  |                                      |                                                                    |                                     |                                     |
| IV. WATER. <i>Would the proposal result in:</i>                                                                                                                                                                                                                                                            |                                      |                                                                    |                                     |                                     |
| a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?                                                                                                                                                                                                               | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Because paving and construction of impermeable surfaces would occur as result of the Proposed Project, absorption rates, drainage patterns, and surface runoff patterns would be altered.                                                                                                                  |                                      |                                                                    |                                     |                                     |
| b) Exposure of people or property to water-related hazards such as flooding?                                                                                                                                                                                                                               | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Urban development in the Plan Area is proposed to be located outside the 100-year floodplain. However, it is possible that persons or property within the Plan Area could be exposed to flooding. Alterations in drainage patterns with the Plan Area could also result in additional downstream flooding. |                                      |                                                                    |                                     |                                     |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                               | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact | No<br>Impact                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| c) Discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity)?                                                                                                                                                                                                                                         | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| Runoff from urban uses could result in incremental changes to water quality in the South Branch of Pleasant Grove Creek and Pleasant Grove Creek.                                                                                                                                                                                                                         |                                      |                                                                    |                                    |                                     |
| d) Changes in the amount of surface water in any water body?                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| Implementation of the project may result in changes in both water quality and quantity in creeks which flow through and are downstream of the Plan Area.                                                                                                                                                                                                                  |                                      |                                                                    |                                    |                                     |
| e) Changes in currents, or the course or direction of water movements?                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| The proposal does not include any planned alterations to the courses of the South Branch of Pleasant Grove Creek or Pleasant Grove Creek.                                                                                                                                                                                                                                 |                                      |                                                                    |                                    |                                     |
| f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?                                                                                                                                                  | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| The rate and location of groundwater recharge in the vicinity could be altered by project development in recharge areas.                                                                                                                                                                                                                                                  |                                      |                                                                    |                                    |                                     |
| g) Altered direction or rate of flow of groundwater?                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| The Proposed project would use water from the City of Roseville, which is currently obtained from Folsom Lake. Use of groundwater is not currently contemplated. Construction activities require only surface grading, and would not likely require excavations or cuts that could affect groundwater recharge; however, this issue will be further addressed in the EIR. |                                      |                                                                    |                                    |                                     |
| h) Impacts to groundwater quality?                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| Any surface development has the potential to impact the quality of groundwater. In particular, future light industrial and/or commercial activities present the possibility of future contamination of shallow groundwater flows, despite anticipated compliance with local, state, and federal regulations for the use, storage and transport of hazardous substances.   |                                      |                                                                    |                                    |                                     |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                       | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Development of the Plan Area would result in an increase in the volume of domestic water required on the site. This quantity will need to be provided by the City of Roseville's water supply system. Providing water to the project may require adjustments to the City's water distribution and transmission systems.                                                                                           |                                      |                                                                    |                                     |                                     |
| V. AIR QUALITY. <i>Would the proposal:</i>                                                                                                                                                                                                                                                                                                                                                                        |                                      |                                                                    |                                     |                                     |
| a) Violate any air quality standard or contribute to an existing or projected air quality violation?                                                                                                                                                                                                                                                                                                              | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Automobile traffic generated from residential and non-residential uses would result in air emissions from automobile exhaust which would contribute to regional air pollution levels. Construction activity would also impact air quality by increasing particulate matter and other pollutants generated by construction equipment.                                                                              |                                      |                                                                    |                                     |                                     |
| b) Exposure of sensitive receptors to pollutants?                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| The proposal includes designation of several sensitive receptors, including senior housing and assisted care facilities at Eskaton Village, residential uses, and three schools in Phase I and a fourth school in Phase II. In addition, pollution sources in the project area and vicinity include arterial roadways and light industrial development on the neighboring Hewlett-Packard and Walaire properties. |                                      |                                                                    |                                     |                                     |
| c) Alter air movement, moisture, or temperature, or cause any change in climate?                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| The project scale is not substantial enough to result in the alteration of local or regional climate conditions.                                                                                                                                                                                                                                                                                                  |                                      |                                                                    |                                     |                                     |
| d) Create objectionable odors?                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| The uses allowed under the proposal, including residential and commercial uses are not typically associated with the creation of objectionable odors. Residential uses could be exposed to odors generated by existing or planned adjacent industrial development to the north or east.                                                                                                                           |                                      |                                                                    |                                     |                                     |



| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                       | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| VI. TRANSPORTATION/CIRCULATION. <i>Would the proposal result in:</i>                                                                                                                                                                                                                              |                                      |                                                                    |                                     |                                     |
| a) Increased vehicle trips or traffic congestion?                                                                                                                                                                                                                                                 | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input type="checkbox"/>            |
| An increase in the amount of motor vehicle traffic within the Plan Area and surrounding communities would occur as a direct result of the Proposed Project. Increased traffic congestion could lead to inconsistencies with the City's General Plan Level of Serviced standard for intersections. |                                      |                                                                    |                                     |                                     |
| b) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?                                                                                                                                                            | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| The Proposed Project will be designed with adequate emergency access and circulation.                                                                                                                                                                                                             |                                      |                                                                    |                                     |                                     |
| c) Inadequate emergency access or access to nearby uses?                                                                                                                                                                                                                                          | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| The proposal would require services consistent with city policies regarding emergency access. It is currently unclear if adequate response time is available to the Plan Area from existing fire and police stations.                                                                             |                                      |                                                                    |                                     |                                     |
| d) Insufficient parking capacity on-site or off-site?                                                                                                                                                                                                                                             | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Additional parking facilities would be required within the Plan Area, and would be provided in accordance with City of Roseville regulations.                                                                                                                                                     |                                      |                                                                    |                                     |                                     |
| e) Hazards or barriers for pedestrians or bicyclists?                                                                                                                                                                                                                                             | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| During construction, parking for construction personnel would be located on-site. Parking for commercial and public uses would be provided in amounts specified by City of Roseville regulations.                                                                                                 |                                      |                                                                    |                                     |                                     |
| f) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?                                                                                                                                                                                     | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| The proposal would fall under the local specific and general plans in order to meet the demands for alternative modes of transportation.                                                                                                                                                          |                                      |                                                                    |                                     |                                     |
| g) Rail, waterborne or air traffic impacts?                                                                                                                                                                                                                                                       | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| The project is not in proximity to existing or planned water, rail, or air traffic, so it would have no impact.                                                                                                                                                                                   |                                      |                                                                    |                                     |                                     |



| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                              | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact | No<br>Impact             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------------------|
| <b>VII. BIOLOGICAL RESOURCES.</b> <i>Would the proposal result in impacts to:</i>                                                                                                                                                                                                                        |                                      |                                                                    |                                    |                          |
| a) Endangered, threatened or rare species or their habitats (including, but not limited to plants, fish, insects, animals, and birds)?                                                                                                                                                                   | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input type="checkbox"/> |
| Development of the Plan Area would result in changes in vegetation and habitat which would alter the composition of wildlife species in the area. Sensitive plant and animal species could be affected by Plan area development.                                                                         |                                      |                                                                    |                                    |                          |
| b) Locally designated species (e.g., heritage trees)?                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Substantial stands of oak woodlands exist on the site, including dense stands of blue oaks, and occasional valley and interior live oaks. It is likely that oak trees which are protected under the City of Roseville Tree Preservation Ordinance No. 2294 would be affected during Plan implementation. |                                      |                                                                    |                                    |                          |
| c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?                                                                                                                                                                                                                     | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| The proposal would affect a range of habitat types currently existing within the Plan Area, including non-native grassland, blue oak woodland, oak riparian forest, and a variety of wetland habitats, discussed below.                                                                                  |                                      |                                                                    |                                    |                          |
| d) Wetland habitat (e.g., marsh, riparian and vernal pool)?                                                                                                                                                                                                                                              | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| The proposal would affect a number of types of wetland habitats which exist in the Plan Area, including freshwater marsh, northern hardpan vernal pool, seasonal freshwater marsh, and intermittent creeks.                                                                                              |                                      |                                                                    |                                    |                          |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|--------------------------|
| e) Wildlife dispersal or migration corridors?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| Development of the Plan Area would result in changes to vegetation and habitat which would alter the composition and distribution of wildlife species in the area.                                                                                                                                                                                                                                                                                                                                                                                                                      |                                      |                                                                    |                                     |                          |
| VIII. ENERGY AND MINERAL RESOURCES. <i>Would the proposal:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      |                                                                    |                                     |                          |
| a) Result in a significant consumption of energy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| Substantial amounts of fuel and energy would be used during the construction phase for site preparation, and for heating/cooling and transportation at full buildout and occupancy of future development in the Plan Area.                                                                                                                                                                                                                                                                                                                                                              |                                      |                                                                    |                                     |                          |
| b) Use non-renewable resources in a wasteful and inefficient manner?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Uses allowed under the requested land use designation would increase the demand for natural resources. It is anticipated that future development in the Plan Area would comply with all state requirements for energy-efficient construction.                                                                                                                                                                                                                                                                                                                                           |                                      |                                                                    |                                     |                          |
| c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| According to the California Division of Mines and Geology, a majority of the Plan Area has been designated as Mineral Resource Zone - 1, indicating that there are no significant mineral resource deposits present. Approximately 250 acres are designated Mineral Resource Zone - 3, which indicates that mineral resources are present, but data is not available to establish the significance of the deposit. Finally, about 115 acres are designated Mineral Resource Zone - 4, which indicates that inadequate information exists to draw any conclusion about mineral deposits. |                                      |                                                                    |                                     |                          |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                               | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|--------------------------|
| <b>IX. HAZARDS. <i>Would the proposal involve:</i></b>                                                                                                                                                                                                                                                    |                                      |                                                                    |                                     |                          |
| a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?                                                                                                                                                            | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| During construction of the Proposed Project, oil, diesel fuel, gasoline, hydraulic fluid, and other liquid hazardous materials would be used at the project site; if spilled, these substances could pose a risk to the environmental or human health. These issues will be further evaluated in the EIR. |                                      |                                                                    |                                     |                          |
| Uses allowed in the residential and commercial portions of the Plan Area are not associated with substantial use, storage, and transportation of hazardous substances. Development of the Proposed Project is not anticipated to increase the risk of explosion or the release of hazardous substances.   |                                      |                                                                    |                                     |                          |
| b) Possible interference with an emergency response plan or emergency evacuation plan?                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| The Plan is not expected to interfere with an emergency response plan or emergency evacuation plan.                                                                                                                                                                                                       |                                      |                                                                    |                                     |                          |
| c) The creation of any health hazard or potential health hazard?                                                                                                                                                                                                                                          | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| It is possible that health hazards could be created due to the proximity of future residential development to light industrial uses and energy facilities such as high power transmission lines, electrical receiving stations and substations.                                                           |                                      |                                                                    |                                     |                          |
| d) Exposure of people to existing sources of potential health hazards?                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| See IX.c), above.                                                                                                                                                                                                                                                                                         |                                      |                                                                    |                                     |                          |
| e) Increased fire hazard in areas with flammable brush, grass, or trees?                                                                                                                                                                                                                                  | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Implementation of the proposal would result in a decrease in available flammable brush within the project vicinity. Development would be allowed in the vicinity of vegetated open space areas and grasslands, which could result in increased fire hazards.                                              |                                      |                                                                    |                                     |                          |



| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                              | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|--------------------------|
| X. NOISE. <i>Would the proposal result in:</i>                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                                                    |                                     |                          |
| a) Increases in existing noise levels?                                                                                                                                                                                                                                                                                                                                                                                   | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input type="checkbox"/> |
| Noise levels would increase as a result of increased traffic and urban activity.                                                                                                                                                                                                                                                                                                                                         |                                      |                                                                    |                                     |                          |
| b) Exposure of people to severe noise levels?                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| The project is not expected to result in exposure of occupants to severe noise levels. Uses allowed in the project are not typically associated with severe noise levels. The project would incrementally increase noise levels along access streets. In addition, residential uses near existing or planned industrial development could be exposed to severe noise levels.                                             |                                      |                                                                    |                                     |                          |
| XI. PUBLIC SERVICES. <i>Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:</i>                                                                                                                                                                                                                                                            |                                      |                                                                    |                                     |                          |
| a) Fire protection?                                                                                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| One new fire station has been identified in the Proposed Project. It is anticipated that this new station would service the portion of the project site where existing facilities may not be considered adequate.                                                                                                                                                                                                        |                                      |                                                                    |                                     |                          |
| b) Police protection?                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| Development of the site with requested land uses would require services consistent with city policies regarding police protection.                                                                                                                                                                                                                                                                                       |                                      |                                                                    |                                     |                          |
| c) Schools?                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| The Plan as proposed includes site for the construction of two new elementary schools and one junior high school in Phase I and a fourth elementary school in Phase II. The residential development in the Plan Area would generate elementary, junior, or high school age students. Development on the Plan Area, and throughout Roseville, could generate the need for additional continuation high school facilities. |                                      |                                                                    |                                     |                          |
| d) Maintenance of public facilities, including roads?                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| The Proposed Project would require maintenance of public facilities including sewers and water infrastructure and roads.                                                                                                                                                                                                                                                                                                 |                                      |                                                                    |                                     |                          |
| e) Other governmental services?                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| The Proposed Project would require the provision of all city services including governmental services.                                                                                                                                                                                                                                                                                                                   |                                      |                                                                    |                                     |                          |



| Issues (and Supporting Information Sources)                                                                                                                                             | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact | No<br>Impact             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------------------|
| <b>XII. UTILITIES AND SERVICE SYSTEMS.</b> <i>Would the proposal result in a need for new systems or supplies, or substantial alternations to the following utilities:</i>              |                                      |                                                                    |                                    |                          |
| a) Power or natural gas?                                                                                                                                                                | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Expansion of electricity and natural gas systems would be required to serve the Proposed Project.                                                                                       |                                      |                                                                    |                                    |                          |
| b) Communications systems?                                                                                                                                                              | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Expansion of communications systems would be required to serve the Proposed Project.                                                                                                    |                                      |                                                                    |                                    |                          |
| c) Local or regional water treatment or distribution facilities?                                                                                                                        | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Expansion of water treatment systems would be required to serve the Proposed Project.                                                                                                   |                                      |                                                                    |                                    |                          |
| d) Sewer or septic tanks?                                                                                                                                                               | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Expansion of sewer systems would be required to serve the Proposed Project.                                                                                                             |                                      |                                                                    |                                    |                          |
| e) Storm water drainage?                                                                                                                                                                | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Expansion of the stormwater drainage system would be required to serve the Proposed Project.                                                                                            |                                      |                                                                    |                                    |                          |
| f) Solid waste disposal?                                                                                                                                                                | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Expansion of the solid waste and disposal systems would be required to serve the Proposed Project.                                                                                      |                                      |                                                                    |                                    |                          |
| g) Local or regional water supplies?                                                                                                                                                    | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |
| Expansion of the water systems would be required to serve the Proposed Project.                                                                                                         |                                      |                                                                    |                                    |                          |
| <b>XIII. AESTHETICS.</b> <i>Would the proposal:</i>                                                                                                                                     |                                      |                                                                    |                                    |                          |
| a) Affect a scenic vista or scenic highway?                                                                                                                                             | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input type="checkbox"/> |
| The urbanization of currently vacant property may be considered aesthetically adverse by some people and could alter the viewshed from existing or future adjacent homes or other uses. |                                      |                                                                    |                                    |                          |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                    | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|-------------------------------------|
| b) Have a demonstrable negative aesthetic effect?                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| The proposal would result in a visual environment similar in nature to that of other recent urban development in the City of Roseville and adjacent communities. The Proposed Project would be subject to design and landscaping requirements of the Roseville Community Design Guidelines, intended to avoid creation of negative aesthetics. |                                      |                                                                    |                                    |                                     |
| c) Create light or glare?                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| Light and glare would be produced by most land uses proposed within the project. Commercial land uses and street lights are anticipated to represent the major light and glare sources in the Plan Area.                                                                                                                                       |                                      |                                                                    |                                    |                                     |
| XIV. CULTURAL RESOURCES. <i>Would the proposal:</i>                                                                                                                                                                                                                                                                                            |                                      |                                                                    |                                    |                                     |
| a) Disturb paleontological resources?                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| The geologic substructure underlying the Plan Area is primarily made up of Holocene and Pleistocene formations. Such formations are known to contain fossils and other paleontological resources.                                                                                                                                              |                                      |                                                                    |                                    |                                     |
| b) Disturb archaeological resources?                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| Archeological surveys of the majority of the Plan Area have resulted in the identification of three prehistoric sites within the Plan Area. The sites have been characterized by groundstone artifacts, lithic remains, tool fragments, and the like. These resources could be affected by implementation of the proposal.                     |                                      |                                                                    |                                    |                                     |
| c) Affect historical resources?                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/>            |
| Historic resources surveys of the Plan Area have identified the historic remnants of a brick cistern of unknown origin on the Walaire property. It is possible that future development could disturb or destroy this resource.                                                                                                                 |                                      |                                                                    |                                    |                                     |
| d) Have the potential to cause a physical change which would affect unique ethnic cultural values?                                                                                                                                                                                                                                             | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| Implementation of the Proposed Project does not carry the potential for physical change which would affect unique ethnic cultural values.                                                                                                                                                                                                      |                                      |                                                                    |                                    |                                     |
| e) Restrict existing religious or sacred uses within the potential impact area?                                                                                                                                                                                                                                                                | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| There are no known religious or sacred uses within the Plan Area.                                                                                                                                                                                                                                                                              |                                      |                                                                    |                                    |                                     |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                                                              | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact  | No<br>Impact             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|-------------------------------------|--------------------------|
| <b>XV. RECREATION. <i>Would the proposal:</i></b>                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |                                                                    |                                     |                          |
| a) Increase the demand for neighborhood or regional parks or other recreational facilities?                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| The Proposed Project would generate the need for additional recreational facilities. The proposal contains sites for a number of new parks and associated recreational facilities.                                                                                                                                                                                                                                                                       |                                      |                                                                    |                                     |                          |
| b) Affect existing recreational opportunities?                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/>             | <input type="checkbox"/>                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| The proposal would not result in the removal or reduction of any existing recreational facilities.                                                                                                                                                                                                                                                                                                                                                       |                                      |                                                                    |                                     |                          |
| <b>XVI. MANDATORY FINDINGS OF SIGNIFICANCE.</b>                                                                                                                                                                                                                                                                                                                                                                                                          |                                      |                                                                    |                                     |                          |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>            | <input type="checkbox"/> |
| The potential exists for degradation of habitat and reduction in the number of restrictions in the range of a rare or endangered species.                                                                                                                                                                                                                                                                                                                |                                      |                                                                    |                                     |                          |
| b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>            | <input type="checkbox"/> |
| The project would result in an irreversible loss of grazing land, and may result in the long-term commitment of natural resources and city services in order to achieve short-term goals.                                                                                                                                                                                                                                                                |                                      |                                                                    |                                     |                          |

| Issues (and Supporting Information Sources)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Potentially<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less Than<br>Significant<br>Impact | No<br>Impact             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------|------------------------------------|--------------------------|
| <p>c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)</p> <p>The project has impacts which are individually limited, but cumulatively considerable. The project would contribute to the regional impact to the economic base, housing, transportation and circulation systems, air quality, and drainage.</p> | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                                           | <input type="checkbox"/>           | <input type="checkbox"/> |
| <p>d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> <p>The project may have environmental effects which would incrementally cause adverse effects on human beings, either directly or indirectly.</p>                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                                | <input type="checkbox"/>           | <input type="checkbox"/> |



## 9.0 DETERMINATIONS

On the basis of this initial evaluation:

I find that the Proposed Project could not have a significant effect on the environment and a negative declaration will be prepared. ☐

I find that the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A Negative Declaration will be prepared. ☐

I find that the Proposed Project may have significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An Environmental Impact Report is required, but it must analyze only the effects that remain to be addressed. ☒

I find although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are impose upon the Proposed Project. ☐

*Nela Luken*

*Signature*

Nela Luken

*Printed Name*

*11/5/96*

*Date*

City of Roseville

*For*






PARKS & RECREATION  
**CITY OF ROSEVILLE**  
TRADITION • PRIDE • PROGRESS  
MEMORANDUM

401 VERNON STREET, #B • ROSEVILLE, CA 95678  
(916) 774-5242 • TDD (916) 774-5220 • FAX (916) 773-5595

TO: NELA LUKEN, PLANNING DEPARTMENT

FROM: PAULA FINLEY, PARK DEVELOPMENT MANAGER 

SUBJECT: NORTH ROSEVILLE SPECIFIC PLAN - PARK CREDITS

DATE: OCTOBER 28, 1996

The Parks and Recreation Department has reviewed the proposed parks for the North Roseville Specific Plan, Phases 1 and 2 as well as the high density alternative for Phase I. In our review of proposed parks and the dedication credits associated with the plan, we have the following comments:

- 1) The overall plan and distribution of park lands and open space is acceptable to us as proposed.
- 2) Regarding credits for dedication of these park lands, we have a few comments:
  - a) The proposed credits for open spaces shown are acceptable at a 1:10 ratio.
  - b) To the extent that proposed active park lands are in the floodplain, we will give a 1:10 or 1:5 ratio depending on active recreational value. Specifically the active park parcels, DC 51, WN 50a and 50b and W-50, and WW - 50 have areas which lie in the floodplain. Please ask the developer to provide us with which portions of these parcels and the associated acreage that are in the floodplain. We will then review these sites and assign credits accordingly.
- 3) In that there appears to be adequate park land in the overall plan, we do not anticipate any additional land dedication resulting from the possible change in credits for these park parcels.
- 4) In parcels WW 90 and 91 are these wetland re-creation areas and preserves and what is the City's obligation associated with these parcels.
- 5) In our figuring of proposed total park acreage to be dedicated, we did not include parcels WW 51a-f in our calculations. We are unclear as to the purpose of these parcels, and whose responsibility it will be to develop these parcels. Please ask the developer to clarify what are the intended plans/development for these parcels.

cc: Mike Shellito







## ROSEVILLE TELEPHONE COMPANY

November 20, 1996

Nela Luken  
Roseville Planning Department  
316 Vernon Street, #104  
Roseville, CA 95678

Dear Nela,

Re: Environmental Impact Report - North Roseville Specific Plan

### Telephone/Communication Facilities

Roseville Telephone Company will provide service to new developments in accordance with our filed tariffs. Telephone facilities will be constructed in conjunction with development.

Public utility easements will be required to serve new development projects. 30' x 60' rights-of-way may also be required for controlled environment vault sites. The above requirements will be identified prior to development. If interior streets are privately owned, all on-site telephone facilities may be the financial responsibility of the developer.

Roseville Telephone will provide telephone facilities to a single, mutually agreeable, termination point within any commercial development. The installation and maintenance of all telephone facilities between this termination point and each tenant space is the developer's responsibility. To assist in the design, installation and/or maintenance of the inside wiring of any apartments, housing projects and commercial buildings, RTC Communications (RCC), a division of Roseville Telephone Company, is available to provide any or all of these services.

### Impacts

Although no unusual problems are anticipated in providing telephone service, Roseville Telephone requires approved plans to determine the exact routes to access new development. Underground substructure requirements will be installed in conjunction with street infrastructure. This substructure must be clear of all landscape vegetation with root systems that extend deeper than 36 inches. The developer is expected to provide sufficient lead time for Roseville Telephone to procure materials and schedule labor to install telephone facilities.

**RECEIVED**

NOV 22 1996

Roseville Telephone reserves the right to place a limited number of surface-mounted terminals in any new project. Telephone facilities both above and below ground require a 12-foot radius clear of any obstruction that would hinder access to these locations.

Any temporary facilities placed for the developer's use, that cannot be incorporated into a permanent feed cable, will be billed to the developer. In addition, if any existing telephone facilities need relocation due to construction of a project, the developer will bear the cost.

The City of Roseville should give serious consideration to expansion impacts for all utilities. Leap-frog development could cause undue hardships on both the utilities and the developers in the form of increased installation costs and line extension charges.

If I can be of any further assistance to you regarding this plan, please feel free to contact me at 786-1212.

Sincerely,

A handwritten signature in cursive script that reads "Judee Jensen".

Judee Jensen  
Outside Plant Engineer

jej:wsd

SACRAMENTO METROPOLITAN



TIMOTHY W. TAYLOR  
Chief, Mobile Source Division

Chief, Mobile Source  
**RECEIVED**

NOV 23 1996

PLANNING DEPARTMENT

November 21, 1996

**Ms. Nela Luken  
Associate Planner  
Roseville Planning Department  
316 Vernon Street, Suite 104  
Roseville, CA, 95678**

Subject: PROJECT NAME: NOTICE OF PREPARATION FOR - NORTH ROSEVILLE  
SPECIFIC PLAN  
OUR FILE NUMBER: 950072

Dear Ms. Luken:

Thank you for the opportunity to review the above-captioned NOP. The staff of the Air Quality Management District has reviewed the document and offers the following comments.

1. The Sacramento area currently violates federal and state standards for ozone. In 1994 the SMAQMD established significance criteria for project-specific emissions of reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>), both of which are precursors to ozone, that would identify singularly substantial contributions to the formation of ozone. The project-specific significance criteria for ROG and NO<sub>x</sub> is 85 pounds per day, for each. For particulate matter (PM<sub>10</sub>), the significance level is 275 pounds per day.
2. We recommend that the Draft EIR consider, and recommend mitigation measures for, on-going emissions from the project; as well as those generated during any construction phase(s). It is also recommended that any emissions benefit from reduced-emission heavy-duty construction equipment also be considered.

Again, thank you for referring the NOP to us for comment. If you have any questions regarding these comments, please feel free to call me at (916) 386-7032.

Sincerely,

*Phil Stafford*

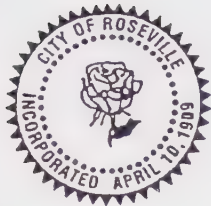
**Phil Stafford**  
**Associate Air Quality Planner**

cc: Ron Maertz, SMAQMD  
Dick Johnson, Placer County APCD  
Dave Vintze, Placer County APCD

G:\MOBILE\WP\PJS\LANDUSE\PR950072.ltr








PARKS & RECREATION  
**CITY OF ROSEVILLE**  
TRADITION • PRIDE • PROGRESS

401 VERNON STREET, #B • ROSEVILLE, CA 95678  
(916) 774-5242 • TDD (916) 774-5220 • FAX (916) 773-5595

MEMORANDUM

TO: NELA LUKEN, ASSOCIATE PLANNER

FROM: PAULA FINLEY, PARK DEVELOPMENT MANAGER 

SUBJECT: NORTH ROSEVILLE SPECIFIC PLAN - Comments on NOP for Draft EIR

DATE: NOVEMBER 25, 1996

The Parks and Recreation Department has reviewed the NOP for the Draft EIR for the North Roseville Specific Plan and offers the following comments:

1. Park and Recreation facilities and related issues should be developed based on information contained in the *Park Visions 2010 Comprehensive Parks and Recreation Master Plan*, Chapter VI, Facility Standards (October 1994) and other chapters as applicable.
2. The EIR should identify all known environmental constraints on proposed park sites. This should include wetlands, vernal pools, significant tree stands and topographic constraints. Environmental constraint information is essential to ensure enough unconstrained park acreage is available to accommodate active facility development.
3. The proposed park sizes and service areas should be considered in the impact analysis ( *Park Visions 2010 Comprehensive Parks and Recreation Master Plan*, Table VI-2, Recommended Park Standards)
4. Any impact to parks that may result from shared facilities (i.e. with school or commercial uses) should be identified and mitigated.
5. Unconstrained park land proposed for dedication to the city at a credit of 1:1 should be tabulated (in acres) by park site. This acreage figure should be compared to active park land dedication requirements contained in the *Park Visions 2010 Comprehensive Park and Recreation Master Plan*, Table VI-2, Recommended Park Standards. Final ratios will be approved and/or negotiated by the Parks and Recreation Director. (Also see attached memo)

Additional comments concerning this project were submitted to you in a memo dated October 28, 1996 and is attached for your reference.

cc: Mike Shellito, Director  
Attachment





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
Sacramento Field Office

3310 El Camino Avenue, Suite 130  
Sacramento, California 95821-6340

RECEIVED

NOV 26 1996

PLANNING DEPARTMENT

November 25, 1996

IN REPLY REFER TO:

In Reply Refer To:  
PPN 2215

City of Roseville  
Planning Department  
316 Vernon Street, #104  
Roseville, California 95678

DEC 02 1996

Subject: Notice of Preparation of a Draft Environmental Impact Report;  
North Roseville Specific Plan, Pleasant Grove Creek, Roseville,  
Placer County, California

Dear Ms. Luken:

Thank you for the opportunity to review the Notice of Preparation for an Environmental Impact Report related to North Roseville Specific Plan. The attached enclosures are intended to assist you in the early environmental review of this proposal. Future consultation with the U.S. Fish and Wildlife Service (Service) may be required under the provisions of the Fish and Wildlife Coordination Act or the Endangered Species Act, if project activities are anticipated to affect federally listed endangered species or impact jurisdictional wetlands.

Enclosure A provides a list of sensitive species that may occur in Placer County and general survey guidelines. The Service recommends that surveys be completed by a qualified biologist on the proposed project site to confirm the presence or absence of special-status species or their habitats. Enclosure B recommends general guidelines for identifying and mitigating project impacts to fish, wildlife, and their habitats. The Council on Environmental Quality developed regulations for implementing the National Environmental Policy Act (NEPA), and defines mitigation to include: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact over time; and (5) compensating for impacts. The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Accordingly, we maintain that the best way to mitigate for the adverse biological impacts is avoidance when at all possible.

We encourage you to use these guidelines to develop a comprehensive environmental document that addresses these needs. If you have any questions regarding these comments, please contact Steve Miller in the Wetlands Branch at (916) 979-2113.

Sincerely,

  
Joel A. Medlin  
Field Supervisor

Enclosures

cc: AES-FWS, Portland, OR  
FWS-ES, Section 7  
Reg. Mgr., CDFG, Reg. 2, Rancho Cordova, CA  
(w/o enclosures)



ATTACHMENT A

LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES AND CANDIDATE  
SPECIES THAT MAY OCCUR IN OR BE AFFECTED BY PROJECTS IN THE AREA OF  
CITRUS HEIGHTS, CALIFORNIA  
November 19, 1996

**Listed Species**

**Birds**

- American peregrine falcon, *Falco peregrinus anatum* (E)
- California clapper rail, *Rallus longirostris obsoletus* (E)
- marbled murrelet critical habitat, *Brachyramphus marmoratus* (T)
- Aleutian Canada goose, *Branta canadensis leucopareia* (T)
- western snowy plover, *Charadrius alexandrinus nivosus* (T)
- bald eagle, *Haliaeetus leucocephalus* (T)

**Reptiles**

- giant garter snake, *Thamnophis gigas* (T)

**Amphibians**

- California red-legged frog, *Rana aurora draytonii* (T)

**Fish**

- delta smelt, *Hypomesus transpacificus* (T)

**Invertebrates**

- vernal pool tadpole shrimp, *Lepidurus packardi* (E)
- vernal pool fairy shrimp, *Branchinecta lynchi* (T)
- valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

**Fish**

- Central Valley steelhead, *Oncorhynchus mykiss* (PE)
- Klamath Mts. Province steelhead, *Oncorhynchus mykiss* (PT)
- Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

**Candidate Species**

**Birds**

- mountain plover, *Charadrius montanus* (C)

**Amphibians**

- California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

**Mammals**

- pygmy rabbit, *Brachylagus idahoensis* (SC)
- greater western mastiff-bat, *Eumops perotis californicus* (SC)
- small-footed myotis bat, *Myotis ciliolabrum* (SC)
- long-eared myotis bat, *Myotis evotis* (SC)
- fringed myotis bat, *Myotis thysanodes* (SC)
- long-legged myotis bat, *Myotis volans* (SC)
- Yuma myotis bat, *Myotis yumanensis* (SC)
- San Joaquin pocket mouse, *Perognathus inornatus* (SC)
- Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)
- Sierra Nevada red fox, *Vulpes vulpes necator* (SC)

**Species of Concern****Birds**

- tricolored blackbird, *Agelaius tricolor* (SC)  
 western burrowing owl, *Athene cunicularia hypugea* (SC)  
 ferruginous hawk, *Buteo regalis* (SC)  
 little willow flycatcher, *Empidonax traillii brewsteri* (SC)  
 white-faced ibis, *Plegadis chihi* (SC)  
 San Joaquin LeConte's thrasher, *Toxostoma lecontei macmillanorum* (SC)

**Reptiles**

- northwestern pond turtle, *Clemmys marmorata marmorata* (SC)  
 California horned lizard, *Phrynosoma coronatum frontale* (SC)

**Amphibians**

- Tehachapi slender salamander, *Batrachoseps stebbinsi* (SC)  
 limestone salamander, *Hydromantes brunus* (SC)  
 Siskiyou Mountains salamander, *Plethodon stormi* (=elongatus s.) (SC)  
 southern torrent (seep) salamander, *Rhyacotriton variegatus* (=olympicus) (SC)  
 western spadefoot toad, *Scaphiopus hammondi* (SC)

**Fish**

- green sturgeon, *Acipenser medirostris* (SC)

**Invertebrates**

- San Joaquin dune beetle, *Coelus gracilis* (SC)  
 Antioch andrenid bee, *Perdita scitula antiochensis* (SC)

**Notes:**

- |      |                                   |                                                                                                                                                               |
|------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (E)  | <i>Endangered</i>                 | Species that is in danger of extinction throughout all or a significant portion of its range.                                                                 |
| (T)  | <i>Threatened</i>                 | Species that is likely to become endangered within the foreseeable future.                                                                                    |
| (P)  | <i>Proposed</i>                   | Species that has been proposed in the <i>Federal Register</i> to be listed as endangered or threatened.                                                       |
| (CH) | <i>Critical Habitat</i>           | Area essential to the conservation of a species.                                                                                                              |
| (C)  | <i>Candidate</i>                  | Species for which the Fish and Wildlife Service has sufficient biological information to support a proposal to list as endangered or threatened.              |
| (SC) | <i>Species of Concern</i>         | Species for which existing information indicated may warrant listing, but for which substantial biological information to support a proposed rule is lacking. |
| (CR) | Recommended for candidate status. |                                                                                                                                                               |
| ( )  | Listing petitioned.               |                                                                                                                                                               |
| (*)  | Possibly extinct.                 |                                                                                                                                                               |

## ENCLOSURE A

**Endangered Species.** This attachment identifies those listed, proposed, and/or candidate species that may occur in the proposed project area. Information and maps concerning candidate species in California may be obtained from the California Natural Diversity Data Base, a program administered by the California Department of Fish and Game. Requests for information should be addressed to the Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814. The marketing manager may be contacted by calling (916) 324-0562. You may request additional information from the Chief, California Department of Fish and Game, Non-Game Heritage Program, at (916) 324-8348.

Listed species are fully protected under the mandates of the Endangered Species Act (Act), as amended. Section 9 of the Act and its implementing regulations prohibit the "take" of a federally listed fish and wildlife species by any person, as defined by the Act. Take is defined by the Act "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such species. Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR § 17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures. If a Federal agency is involved with the permitting, funding, or carrying out of this project, initiation of formal consultation is required between that agency and the Service pursuant to section 7 of the Act if it is determined that the proposed project may affect a federally listed species. Federal agencies must confer if they determine that the continued existence of a proposed species may be jeopardized by the project. Such consultation or conference could result in a biological opinion that addresses anticipated effects of the project to listed and proposed species. The biological opinion may authorize a limited level of incidental take for federally listed species.

If a Federal agency is not involved with the project, and federally listed species may be taken as part of the project, then an "incidental take" permit pursuant to section 10(a) of the Act should be obtained. The Service may issue such a permit upon completion by the permit applicant of a satisfactory conservation plan for the listed species that may be affected by the project.

We recommend that appropriately designed surveys for listed, proposed, or candidate species be undertaken by qualified biologists. Surveys for plants should not be restricted to the identified species; instead, a complete botanical inventory of the project site should be conducted. Botanical surveys should be conducted at intervals throughout the spring and summer, in order to maximize the likelihood of encountering each species during the season most appropriate for accurate identification. Surveys should be based on field inspection, and not on prediction of occurrence based on habitat or physical features of the site. Guidelines for conducting adequate botanical surveys are available from the Natural Heritage Division of the California Department of Fish and Game at (916) 322-2493.

The results of all biological surveys should be published in the environmental impact report. The report should include a brief discussion of survey methods (including sampling methods and timing of surveys), results (including a list of all species encountered as well as maps of vegetation types, populations of plant species, and breeding, nesting or burrowing sites or other habitat components important to animal species), and conclusions. If it is concluded that a given sensitive species is not present, the justification for this conclusion should be fully explained.

Should these surveys determine that listed, proposed, or candidate species may be affected by the proposed project, the Service recommends that the project proponent, in consultation with this office and the California Department of

Fish and Game, develop a plan that mitigates for the project's direct and indirect impacts to these species and compensates for project-related loss of habitat. The mitigation plan also should be included in the environmental impact report.

One of the benefits of considering candidate species as well as listed and proposed species early in the planning process is that by exploring alternatives, it may be possible to avoid conflicts that could develop, should a candidate species become listed before the project is complete. In addition, in instances where the Service addresses proposed projects under its Fish and Wildlife Coordination Act authority, we must also analyze the impacts on candidate species and make recommendations to mitigate any adverse effects.



## ENCLOSURE B

The goal of the U.S. Fish and Wildlife Service is to conserve, protect and enhance fish, wildlife, and their habitats by timely and effective provision of fish and wildlife information and recommendations. To assist us in accomplishing this goal, we would like to see the items described below discussed in your environmental documents for the proposed project.

**Project Description.** The document should very clearly state the purposes of, and document the needs for, the proposed project so that the capabilities of the various alternatives to meet the purposes and needs can be readily determined.

A thorough description of all permanent and temporary facilities to be constructed and work to be done as a part of the project should be included. The document should identify any new access roads, equipment staging areas, and gravel processing facilities which are needed. Figures accurately depicting proposed project features in relation to natural features (such as streams, wetlands, riparian areas, and other habitat types) in the project area should be included.

**Affected Environment.** The document should show the location of, and describe, all vegetative cover types in the areas potentially affected by all project alternatives and associated activities. Tables with acreages of each cover type with and without the project for each alternative would also be appropriate. We recommend that all wetlands in the project area be delineated and described according to the classification system found in the Service's Classification of Wetlands and Deepwater Habitats of the United States (Cowardin 1979). The Service's National Wetland Inventory maps would be one starting point for this effort.

The document should present and analyze a full range of alternatives to the proposed project. At least one alternative should be designed to avoid all impacts to wetlands, including riparian areas. Similarly, within each alternative, measures to minimize or avoid impacts to wetlands should be included.

Lists of fish and wildlife species expected to occur in the project area should be in the document. The lists should also indicate for each species whether or not it is a resident or migrant, and the period(s) of the year it would be expected in the project area.

**Environmental Consequences.** The sections on impacts to fish and wildlife should discuss impacts from vegetation removal (both permanent and temporary), filling or degradation of wetlands, interruption of wildlife migration corridors, and disturbance from trucks and other machinery during construction and/or operation. These sections should also analyze possible impacts to streams from construction of outfall structures, pipeline crossings, and filling. Impacts on water quality, including nutrient loading, sedimentation, toxics, biological oxygen demand, and temperature in receiving waters should also be discussed in detail along with the resultant effects on fish and aquatic invertebrates. Discussion of indirect impacts to fish, wildlife, and their habitats, including impacts from growth induced by the proposed project, should also be addressed in the document. The impacts of each alternative should be discussed in sufficient detail to allow comparison between the alternatives.

The cumulative impacts of the project, when viewed in conjunction with other past, existing, and foreseeable projects, need to be addressed. Cumulative impacts to fish, wildlife, wetlands and other habitats, and water quality should be included.

**Mitigation Planning.** Under provisions of the Fish and Wildlife Coordination Act, the Service advises the U.S. Army Corps of Engineers on projects

involving dredge and fill activities in "waters of the United States", of which wetlands and some riparian habitats are subcategories. Since portions of this proposal may ultimately require a Corps permit, the Service will subsequently be involved under the Coordination Act. Therefore, if you have not done so already, we suggest that you or your representative consult the Corps regarding onsite wetlands and related habitats that may fall under their jurisdiction, and include this information in the draft document. When reviewing Corps public notices, the Service generally does not object to projects meeting the following criteria:

1. They are ecologically sound;
2. The least environmentally damaging reasonable alternative is selected;
3. Every reasonable effort is made to avoid or minimize damage or loss of fish and wildlife resources and uses;
4. All important recommended means and measures have been adopted, with guaranteed implementation to satisfactorily compensate for unavoidable damage or loss consistent with the appropriate mitigation goal; and
5. For wetlands and shallow water habitats, the proposed activity is clearly water dependent and there is a demonstrated public need.

The Service may recommend the "no project" alternative for those projects which do not meet all of the above criteria, and where there is likely to be a significant fish and wildlife resource loss.

When projects impacting waterways or wetlands are deemed acceptable to the Service, we recommend full mitigation for any impacts to fish and wildlife. The Council on Environmental Quality regulations for implementing the National Environmental Policy Act define mitigation to include: 1) Avoiding the impact; 2) minimizing the impact; 3) rectifying the impact; 4) reducing or eliminating the impact over time; and 5) compensating for impacts. The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Accordingly, we maintain that the best way to mitigate for adverse biological impacts is to avoid them altogether.

The document should describe all measures proposed to avoid, minimize, or compensate for impacts to fish and wildlife and their habitats. The measures should be presented in as much detail as possible to allow us to evaluate their probable effectiveness.

Because of their very high value to migratory birds, and their ever-increasing scarcity in California, our mitigation goal for wetlands (including riparian and riverine wetlands) is no net loss of in-kind habitat value or acreage (whichever is greater).

For unavoidable impacts, to determine the mitigation credits available for a given mitigation project, we evaluate what conditions would exist on the mitigation site in the future in the absence of the mitigation actions, and compare those conditions to the conditions we would expect to develop on the site with implementation of the mitigation plan.

Mitigation habitat should be equal to or exceed the quality of the habitat to be affected by the project. Baseline information would need to be gathered at the impact site to be able to quantify this goal in terms of plant species diversity, shrub and tree canopy cover, stems/acre, tree height, etc. The ultimate success of the project should be judged according to these same measurements at the mitigation site.

Criteria should be developed for assessing the progress of the project during



its developmental stages as well. Assessment criteria should include rates of plant growth, plant health, and evidence of natural reproduction. Success criteria should be geared toward equaling or exceeding the quality of the highest quality habitat to be affected. In other words, the mitigation effort would be deemed a success in relation to this goal if the mitigation site met or exceeded habitat measurements at a "model" site (plant cover, density, species diversity, etc.).

The plan should present the proposed ground elevations at the mitigation site, along with elevations in the adjacent areas. A comparison of the soils of the proposed mitigation and adjacent areas should also be included in the plan, and a determination made as to the suitability of the soils to support habitats consistent with the mitigation goals.

Because wetland ecosystems are driven by suitable hydrological conditions, additional information must be developed on the predicted hydrology of the mitigation site. The plan should describe the depth of the water table, and the frequency, duration, areal extent, and depth of flooding which would occur on the site. The hydrologic information should include an analysis of extreme conditions (drought, flooding) as well as typical conditions.

The plan must include a timeframe for implementing the mitigation in relation to the proposed project. We recommend that mitigation be initiated prior to the onset of construction. If there will be a substantial time lag between project construction and completion of the mitigation, a net loss of habitat values would result, and more mitigation would be required to offset this loss.

Generally, monitoring of the mitigation site should occur annually for at least the first five years, biennially for years 6 through 11, and every five years thereafter until the mitigation has met all success criteria. Remediation efforts and additional monitoring should occur if success criteria are not met during the first five years. Some projects will require monitoring throughout the life of the project. Reports should be prepared after each monitoring session.

The plan should require the preparation of "as-built" plans. Such plans provide valuable information, especially if the mitigation effort fails. Similarly, a "time-zero" report should be mandated. This report would describe exactly what was done during the construction of the mitigation project, what problems were encountered, and what corrections or modifications to the plans were undertaken.

The plan should detail how the site is to be maintained during the mitigation establishment period, and how long the establishment period will be. It will also be important to note what entity will perform the maintenance activities, and what entity will ultimately own and manage the site. In addition, a mechanism to fund the maintenance and management of the site should be established and identified. A permanent easement should be placed on the property used for the mitigation that would preclude incompatible activities on the site in perpetuity.

Finally, in some cases, a performance bond may be required as part of the mitigation plan. The amount of the bond should be sufficient to cover the costs of designing and implementing an adequate mitigation plan (and purchasing land if needed) should the proposed plan not succeed.

## Reference

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWS/OBS-79/31. U.S. Fish and Wildlife Service, Washington, D.C. 103 pp.



## ATTACHMENT A

### Endangered and Threatened Species that May Occur in or be Affected by Projects in the Following Selected Quads

November 22, 1996

QUAD : 511B FOLSOM

#### **Listed Species**

##### Birds

American peregrine falcon, *Falco peregrinus anatum* (E)

Aleutian Canada goose, *Branta canadensis leucopareia* (T)

bald eagle, *Haliaeetus leucocephalus* (T)

##### Reptiles

giant garter snake, *Thamnophis gigas* (T)

##### Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

##### Fish

delta smelt, *Hypomesus transpacificus* (T)

##### Invertebrates

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

#### **Proposed Species**

##### Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

##### Plants

Sacramento Orcutt grass, *Orcuttia viscida* (PE)

#### **Candidate Species**

##### Birds

mountain plover, *Charadrius montanus* (C)

#### **Species of Concern**

##### Mammals

spotted bat, *Euderma maculatum* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

QUAD : 511B FOLSOM

**Species of Concern**

Mammals

- long-eared myotis bat, *Myotis evotis* (SC)
- fringed myotis bat, *Myotis thysanodes* (SC)
- long-legged myotis bat, *Myotis volans* (SC)
- Yuma myotis bat, *Myotis yumanensis* (SC)
- San Joaquin pocket mouse, *Perognathus inornatus* (SC)
- Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

Birds

- tricolored blackbird, *Agelaius tricolor* (SC)
- western burrowing owl, *Athene cunicularia hypugea* (SC)
- ferruginous hawk, *Buteo regalis* (SC)
- little willow flycatcher, *Empidonax traillii brewsteri* (SC)
- white-faced ibis, *Plegadis chihi* (SC)

Reptiles

- northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
- California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

- western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

- green sturgeon, *Acipenser medirostris* (SC)

QUAD : 511C BUFFALO CREEK

**Listed Species**

Birds

- American peregrine falcon, *Falco peregrinus anatum* (E)
- Aleutian Canada goose, *Branta canadensis leucopareia* (T)
- bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

- giant garter snake, *Thamnophis gigas* (T)

QUAD : 511C BUFFALO CREEK

**Listed Species**

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardii* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

Plants

Sacramento Orcutt grass, *Orcuttia viscida* (PE)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

spotted bat, *Euderma maculatum* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

QUAD : 511C BUFFALO CREEK

**Species of Concern**

Mammals

- Yuma myotis bat, *Myotis yumanensis* (SC)
- San Joaquin pocket mouse, *Perognathus inornatus* (SC)
- Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

Birds

- tricolored blackbird, *Agelaius tricolor* (SC)
- western burrowing owl, *Athene cunicularia hypugea* (SC)
- ferruginous hawk, *Buteo regalis* (SC)
- little willow flycatcher, *Empidonax traillii brewsteri* (SC)
- white-faced ibis, *Plegadis chihi* (SC)

Reptiles

- northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
- California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

- western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

- green sturgeon, *Acipenser medirostris* (SC)

Plants

- Ahart's rush, *Juncus leiospermus* var. *ahartii* (SC)
- legenere, *Legenere limosa* (SC)

QUAD : 512A CITRUS HEIGHTS

**Listed Species**

Birds

- American peregrine falcon, *Falco peregrinus anatum* (E)
- Aleutian Canada goose, *Branta canadensis leucopareia* (T)
- bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

- giant garter snake, *Thamnophis gigas* (T)



QUAD : 512A CITRUS HEIGHTS

**Listed Species**

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardii* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

QUAD : 512A CITRUS HEIGHTS

**Species of Concern**

Birds

- tricolored blackbird, *Agelaius tricolor* (SC)
- western burrowing owl, *Athene cunicularia hypugea* (SC)
- ferruginous hawk, *Buteo regalis* (SC)
- little willow flycatcher, *Empidonax traillii brewsteri* (SC)
- white-faced ibis, *Plegadis chihi* (SC)

Reptiles

- northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
- California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

- western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

- green sturgeon, *Acipenser medirostris* (SC)

Plants

- valley sagittaria, *Sagittaria sanfordii* (SC)

QUAD : 512B RIO LINDA

**Listed Species**

Birds

- American peregrine falcon, *Falco peregrinus anatum* (E)
- Aleutian Canada goose, *Branta canadensis leucopareia* (T)
- bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

- giant garter snake, *Thamnophis gigas* (T)

Amphibians

- California red-legged frog, *Rana aurora draytonii* (T)

Fish

- winter-run chinook salmon, *Oncorhynchus tshawytscha* (E)
- delta smelt, *Hypomesus transpacificus* (T)

QUAD : 512B RIO LINDA

**Listed Species**

Fish

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

ferruginous hawk, *Buteo regalis* (SC)

QUAD : 512B RIO LINDA

**Species of Concern**

Birds

little willow flycatcher, *Empidonax traillii brewsteri* (SC)

white-faced ibis, *Plegadis chihi* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

river lamprey, *Lampetra ayresi* (SC)

Pacific lamprey, *Lampetra tridentata* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Plants

legenere, *Legenere limosa* (SC)

QUAD : 512C SACRAMENTO EAST

**Listed Species**

Birds

American peregrine falcon, *Falco peregrinus anatum* (E)

Aleutian Canada goose, *Branta canadensis leucopareia* (T)

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E)

delta smelt, *Hypomesus transpacificus* (T)



QUAD : 512C SACRAMENTO EAST

**Listed Species**

Fish

delta smelt critical habitat, *Hypomesus transpacificus critical habitat* (T)

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardii* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

QUAD : 512C SACRAMENTO EAST

**Species of Concern**

Birds

ferruginous hawk, *Buteo regalis* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (SC)

white-faced ibis, *Plegadis chihi* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

river lamprey, *Lampetra ayresi* (SC)

Pacific lamprey, *Lampetra tridentata* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Antioch Dunes anthicid beetle, *Anthicus antiochensis* (SC)

Sacramento anthicid beetle, *Anthicus sacramento* (SC)

Plants

valley sagittaria, *Sagittaria sanfordii* (SC)

QUAD : 512D CARMICHAEL

**Listed Species**

Birds

American peregrine falcon, *Falco peregrinus anatum* (E)

Aleutian Canada goose, *Branta canadensis leucopareia* (T)

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

QUAD : 512D CARMICHAEL

**Listed Species**

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardii* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

QUAD : 512D CARMICHAEL

***Species of Concern***

Birds

- tricolored blackbird, *Agelaius tricolor* (SC)
- western burrowing owl, *Athene cunicularia hypugea* (SC)
- ferruginous hawk, *Buteo regalis* (SC)
- little willow flycatcher, *Empidonax traillii brewsteri* (SC)
- white-faced ibis, *Plegadis chihi* (SC)

Reptiles

- northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
- California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

- western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

- green sturgeon, *Acipenser medirostris* (SC)

QUAD : 527C ROCKLIN

***Listed Species***

Birds

- American peregrine falcon, *Falco peregrinus anatum* (E)
- Aleutian Canada goose, *Branta canadensis leucopareia* (T)
- bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

- giant garter snake, *Thamnophis gigas* (T)

Amphibians

- California red-legged frog, *Rana aurora draytonii* (T)

Fish

- delta smelt, *Hypomesus transpacificus* (T)

Invertebrates

- vernal pool tadpole shrimp, *Lepidurus packardii* (E)
- vernal pool fairy shrimp, *Branchinecta lynchi* (T)



QUAD : 527C    ROCKLIN

**Listed Species**

Invertebrates

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

**Species of Concern**

Mammals

spotted bat, *Euderma maculatum* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

ferruginous hawk, *Buteo regalis* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (SC)

white-faced ibis, *Plegadis chihi* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

QUAD : 527C    ROCKLIN

**Species of Concern**

Amphibians

western spadefoot toad, *Scaphiopus hammondi* (SC)

Invertebrates

South Forks ground beetle, *Nebria darlingtoni* (SC)

QUAD : 528C    PLEASANT GROVE

**Listed Species**

Birds

American peregrine falcon, *Falco peregrinus anatum* (E)

Aleutian Canada goose, *Branta canadensis leucopareia* (T)

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardii* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

QUAD : 528C PLEASANT GROVE

**Candidate Species**

Amphibians

California tiger salamander, *Ambystoma californiense* (C)

**Species of Concern**

Mammals

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

western burrowing owl, *Athene cunicularia hypugea* (SC)

ferruginous hawk, *Buteo regalis* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (SC)

white-faced ibis, *Plegadis chihi* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

western spadefoot toad, *Scaphiopus hammondi* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

QUAD : 528D ROSEVILLE

**Listed Species**

Birds

American peregrine falcon, *Falco peregrinus anatum* (E)

Aleutian Canada goose, *Branta canadensis leucopareia* (T)

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Invertebrates

vernal pool tadpole shrimp, *Lepidurus packardii* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

**Proposed Species**

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (PE)

**Candidate Species**

Birds

mountain plover, *Charadrius montanus* (C)

**Species of Concern**

Mammals

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)



QUAD : 528D ROSEVILLE

### ***Species of Concern***

#### Mammals

- Yuma myotis bat, *Myotis yumanensis* (SC)
- San Joaquin pocket mouse, *Perognathus inornatus* (SC)
- Pacific western big-eared bat, *Plecotus townsendii townsendii* (SC)

#### Birds

- tricolored blackbird, *Agelaius tricolor* (SC)
- western burrowing owl, *Athene cunicularia hypugea* (SC)
- ferruginous hawk, *Buteo regalis* (SC)
- little willow flycatcher, *Empidonax traillii brewsteri* (SC)
- white-faced ibis, *Plegadis chihi* (SC)

#### Reptiles

- northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
- California horned lizard, *Phrynosoma coronatum frontale* (SC)

#### Amphibians

- western spadefoot toad, *Scaphiopus hammondi* (SC)

#### Plants

- hispid bird's-beak, *Cordylanthus mollis ssp. hispidus* (SC)
- legenere, *Legenere limosa* (SC)

#### KEY:

- |                                |                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| (E) <i>Endangered</i>          | Listed (in the Federal Register) as being in danger of extinction.                                                    |
| (T) <i>Threatened</i>          | Listed as likely to become endangered within the foreseeable future.                                                  |
| (P) <i>Proposed</i>            | Officially proposed (in the Federal Register) for listing as endangered or threatened.                                |
| (C) <i>Candidate</i>           | Candidate to become a <i>proposed</i> species.                                                                        |
| (SC) <i>Species of Concern</i> | May be endangered or threatened. Not enough biological information has been gathered to support listing at this time. |
| (*)                            | Possibly extinct.                                                                                                     |
| <i>Critical Habitat</i>        | Area essential to the conservation of a species.                                                                      |





## PLACER COUNTY PLANNING DEPARTMENT

11414 B Avenue, Auburn, CA 95603 (916) 889-7470/FAX (916) 889-7499

RECEIVED

DEC 04 1996

PLANNING DEPARTMENT

December 2, 1996

Ne la Luken  
Roseville Planning Department  
316 Vernon Street, Suite 104  
Roseville, CA 95678

RE: Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the North Roseville Specific Plan

Dear Ms. Luken:

The Placer County Planning Department has completed its review of the subject NOP. We request that the City of Roseville address the following areas in the EIR that is to be prepared for this project.

1. **Land Use Compatibility** - Placer County has concerns about the proposed land use plan as it relates to compatibility with existing and future uses in the Sunset Industrial Area (SIA), north of the specific plan area and agricultural land uses to the west of the project.
  - a. **Western Regional Sanitary Landfill** - The proposed land use plan places hundreds of homes just over one mile from the Western Regional Sanitary Landfill. Staff to the Western Placer Waste Management Authority have received numerous complaints over the years about landfill operations related to traffic, noise, debris, ground and surface water contamination and odors. The complaints have largely been generated by residents of the Toad Hill Ranch Estates located approximately 2.5 miles west of the landfill operations. Experience has told us that the placement of thousands of persons in closer proximity to the landfill than the Toad Hill homeowners will undoubtedly generate additional complaints about landfill operations which, due to the disagreeable nature of any landfill operation, cannot be totally avoided.

The EIR should examine the impact upon the future homeowners in the area who may be exposed to the real detrimental affects associated with the landfill operations (e.g., odors and aesthetics). Similarly, the EIR should examine the potential impacts on landfill operations associated with the development of

residential land uses in proximity to the landfill. There is a real potential for the landfill operations to be significantly impacted due to concerns and complaints associated with the future residents of the area. A worse-case-scenario could be that the additional solid waste facilities permit that will be required to expand the landfill west of Fiddymment Ave. may never be obtained due to public outcry about the expansion of the landfill onto an additional 480 acres of land for the next 50 years or so. The loss of such a facility will have severe impacts on future growth in Placer County.

- b. **Industrial** - The proposed project places a significant number of homes in the Low Density Residential category adjacent to land designated Industrial on the 1980 Sunset General Plan (Diamond Creek and Diamond Creek Partners land holdings). The project description does not describe or depict any sort of buffering that would be necessary to separate the two incompatible land use categories. The Placer County General Plan requires a 300 foot distance between residential land uses and industrial land uses unless a significant amount of physical buffering is constructed (e.g., landscaping and berms). In no case could the buffer distance be less than 100 feet. Similarly, the Sunset General Plan seeks to separate industrial land uses from residential land uses by one mile.

The EIR should examine the potential incompatibility between residential land uses and industrial land uses. Project alternatives should include a modified land use plan which depicts open space buffers or non-residential land uses adjacent to the industrial area.

- c. **Placer County Fairgrounds Relocation/Motorsports Park** - We believe that the City is aware of the County's ongoing efforts to identify a suitable place to relocate the County fairgrounds. As a part of the Sunset Industrial Area Plan update the County is considering a location in the area north of the City limits, in the vicinity of the landfill. Such a project could also include a motorsports park, as the current fairgrounds has, but on a larger scale. Encroaching residential uses may eventually lead to the types of complaints now voiced regarding the current fairgrounds location, or increase the difficulty in relocating the fairgrounds at all. The impacts, noise, traffic, etc. should be addressed in the EIR for this specific plan.
- d. **Agricultural** - The Walaire, Diamond Creek and Sares/Regis properties abut agriculturally designated lands in Placer County. Similar to the concerns expressed above, the EIR should examine the potential for land use impacts associated with the development and use of incompatible land use types adjacent to each other. Agricultural landowners in Placer County have, for many years, expressed concerns about urban encroachment upon agricultural lands. These concerns have been based upon the affect of this encroachment on the ability of the farmer to use and maintain their property for agricultural production. Complaints associated with noise, dust, and aerial spraying are common. The proposed project will, like the Del Webb project, place thousands of homeowners in close proximity to agricultural lands.



The Sares/Regis properties appear to have addressed this issue, to some extent, by developing an open space corridor along Fiddymont Road. An EIR project alternative should include similar design features along the western project boundaries or other land uses along this specific plan area/agricultural interface.

2. **Biological** - The subject plan area has the potential to contain one or more species of "freshwater fairy shrimp". As you know, four species of this freshwater invertebrate have been listed under the Federal Endangered Species Act. The EIR should examine the impact on these species and appropriately develop a mitigation plan consistent with U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers guidelines.

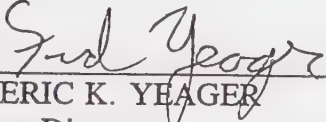
Placer County is currently working with the California Department of Fish and Game, the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers on a Sunset Industrial Area Habitat Conservation Plan (HCP). This plan will provide a region-wide conservation and mitigation plan for the Sunset Industrial Area. If it was desirable to the City, the boundaries of the HCP could be expanded into the City limits and take into consideration impacts associated with the implementation of the subject project. City staff should consult with Loren Clark of the Planning Department if there is any interest in working with the County in this regard.

3. **Impacts on County Services and Facilities** - New residential development in Roseville will impact the County service agencies which serve the citizens of the incorporated areas of the County. Such development will also impact the County's facilities which house the people who provide these services. The County has recently studied these issues and can document the actual impacts from new development. The EIR should discuss this issue and include mitigation measures which will reduce the impacts on the County.

Lastly, please insure that this department and the Department of Public Works is included on the mailing list for the draft EIR, Final EIR and any public notices for workshops or hearings.

If you have any questions or if our comments require any further clarification, please feel free to contact this office. Thank-you for the opportunity to comment on this project.

Sincerely,

  
FREDERIC K. YEAGER  
Planning Director

cc: CEO  
Supervisor Santucci  
Loren Clark

t:\cmd\cmdp\fred\mrspnop





**PLACER COUNTY  
DEPARTMENT OF PUBLIC WORKS**

December 3, 1996

Ms. Nela Luken  
City of Roseville  
Planning Department  
316 Vernon Street, #104  
Roseville, CA 95678

**Subject: North Roseville Specific Plan Notice of Preparation**

Dear Ms. Luken:

The Transportation Planning Division of the Public Works Department has reviewed the Notice of Preparation for the Environmental Impact Report for the North Roseville Specific Plan. We offer the following comments for your consideration:

Traffic Impacts on County Facilities

In conjunction with the Coordination of Environmental Analyses (MOU) between the City of Roseville and Placer County, the EIR needs to evaluate the impacts of the North Roseville Specific Plan on roadways and intersections in the County. This analysis should utilize the County's most recent traffic forecasting model.

Realignment of Junction Boulevard (Circulation Alternative)

The "base" circulation alternative indicates an alignment of Junction Boulevard which swings to the south and connects with Baseline Road east of Fiddymont Road. Preliminary traffic model analysis conducted by Placer County indicates a high potential to reduce traffic volumes on Baseline Road by extending Junction Boulevard west into Fiddymont Road, and then swinging south into Baseline Road (west of Fiddymont). The EIR for the North Roseville Specific Plan should evaluate a circulation alternative which analyzes this alignment of Junction Boulevard.

Ms. Nela Luken  
December 3, 1996  
Page 2

### Cumulative Analysis

Any cumulative analysis should include the proposed West Placer Specific Plan and Sunset Industrial Area Plan, as well as the latest development proposals within Sacramento County (East Antelope Specific Plan) and Sutter County.

### Miscellaneous

Figure 1 of the NOP shows the Placer County/Roseville City limit boundary too far north between Industrial Boulevard and SR 65. Figure 1 also appears to incorrectly identify the individual phases of the project when compared with the text description.

If you have any questions regarding these comments, please contact me at (916) 889-7581.

Sincerely,



William J. Moore, P.E.  
Associate Engineer



4 December 1996

**RECEIVED**

DEC 04 1996

**PLANNING DEPARTMENT**

Nela Luken  
Associate Planner  
City of Roseville  
Planning Department  
316 Vernon Street #104  
Roseville, CA 95678

Re: Notice of Preparation for a Draft Environmental Impact Report for the North Roseville Specific Plan.

Dear Ms. Luken,

Inasmuch as the Notice of Preparation shows a change to the circulation pattern (page 15, figure 5), I request that the Environmental Impact Report identify the impacts and mitigation measures on feeder streets such as Crowder and Blackwood roads. How will these roads be impacted as Baseline road is changed? Also, what will be the impact on Fiddymment Road. Will the recently improved intersection of Fiddymment and Baseline need further expansion? And lastly, what will be the impact on the unincorporated portion of Baseline road?

I thank you for this opportunity to address the Notice of Preparation.

Respectfully,

*Noe O. Fierros*

Noe O. Fierros  
Placer County Planning Commissioner  
District 1

PLACER COUNTY  
PLANNING DEPARTMENT

NOE FIERROS  
Planning Commissioner

Home Phone  
(916) 771-0689  
Work Phone







## PLACER COUNTY

## AIR POLLUTION CONTROL DISTRICT

11464 B Avenue, Auburn, CA 95603 • (916) 889-7130 • FAX (916) 889-7107

*Richard G. Johnson, Air Pollution Control Officer*

December 5, 1996

City of Roseville  
Planning Department  
Attn: Nela Luken  
P.O. Box 1138  
Rocklin, CA 95677

Subject: Notice of Preparation for a Draft Environmental Impact Report for the  
North Roseville Specific Plan

Dear Ms. Luken:

The Placer County Air Pollution Control District (District) has completed our initial review of the Notice of Preparation for the above referenced project.

The proposed project has the potential to significantly impact air quality within the City of Roseville and Placer County. As a result, a detailed air quality analysis using a reasonable worst case scenario must be provided in the Draft Environmental Impact Report (DEIR).

The DEIR preparers are encouraged to contact this office prior to preparing the Administrative Draft EIR to discuss the level of analysis needed and to identify feasible mitigation measures to include in the DEIR. In addition to the setting and background sections, the DEIR should provide the following information so that the significance of project alone and cumulative impacts can be determined.

1. For infrastructure improvements, estimate the amount of dust emissions that could be generated based on the cubic yards of material and/or number of acres to be disturbed. In addition, estimate the types and quantities of emissions (in pounds per day) that could be expected from the diesel powered earth moving equipment. This analysis should include impacts associated with off-site improvements needed by the project such as water line extensions.
2. Please identify how the removed vegetation will be disposed. Opening burning of cleared vegetation will not be permitted unless it can be documented in writing to the District that no other alternatives exist.

Ms Nela Luken  
City of Roseville Planning Department  
North Roseville Specific Plan  
Page 2

3. If the traffic study prepared for this project identifies any intersection(s) that would fall below a Levels of Service D under project alone or cumulative development scenarios, a detailed Caline 4 Carbon Monoxide analysis shall be prepared.
4. Estimate the amount of Particulate, Carbon Monoxide and Nitrous Oxide emissions that can be expected from residential fireplaces and hot water heaters.
5. Estimate mobile source emissions using the Air Resources Board Urbemis5 computer model for buildout of the Plan area. Emission estimates should be provided in pounds per day and tons per year.
6. Identify which of the District's Best Available Mitigation Measures will be implemented to reduce short and long-term air quality impacts. Also, discuss how the mitigation measures will be monitored to ensure that they are implemented.
7. Qualitatively and quantitatively (when possible) evaluate the effectiveness of the mitigation measures that are proposed to reduce air quality impacts.
8. Qualitatively discuss this project's overall consistency with the Goals and Policies of the City of Roseville General Plan Air Quality Element. Identify which goals and policies the Plan may be inconsistent with and recommend feasible measures that would make the Plan more consistent with them.
9. If the DEIR determines that the Specific Plan will result in growth inducing impacts, please discuss and quantify these impacts as they relate to air quality issues.
10. Identify any goals, policies and implementation measures contained in the Plan that would serve to reduce air quality impacts.

If you have any questions or concerns, please call me at (916) 889-7130.

Sincerely,



David A. Vintze  
Air Quality Specialist/Associate Planner

DV/dv





# Roseville Joint Union High School District

1750 CIRBY WAY, ROSEVILLE, CALIFORNIA 95661 • (916) 786-2051 • FAX (916) 786-2681

RICHARD STRICKLAND, Deputy Superintendent

BOARD OF TRUSTEES  
ALLAN CAMERON  
CAROL HAMEL  
JAMES JOINER  
GARY A. KIDDER, Jr.  
R. JAN PINNEY

December 6, 1996

Nela Luken  
City of Roseville Planning Department  
316 Vernon Street, Suite 104  
Roseville, CA 95678

## SUBJECT: NOTICE OF PREPARATION NORTH ROSEVILLE SPECIFIC PLAN

Dear Ms. Luken:

Thank you for the opportunity to respond to the revised Notice of Preparation for the North Roseville Specific Plan (NRSP). The proposed project is estimated to generate approximately 917 students at build-out in grades 9 through 12. Currently, the project is located within the Woodcreek High School attendance boundary. This school has a current enrollment of 1565 with a capacity to serve 1600 students.

The proposed project will adversely affect the ability of the District to accommodate students generated from the plan area. The impact created by the NRSP is not accounted for in the District's Master Plan due to the current Urban Reserve classification of the property.

The cumulative impact of the NRSP coupled with the anticipated growth elsewhere in the District will require the construction of a new comprehensive high school. Due to the proximity of the NRSP to Woodcreek High School, a new high school within the plan area is not recommended. Funding for a new comprehensive high school is currently not available.

It is recommended that the Environmental Impact Report for the NRSP include the following information:

1. Analysis of cumulative student yield and facility needs.
2. Analysis of existing facilities and project impact on those facilities.
3. Analysis of future facility needs in relation to cumulative land use allocations

4. Analysis of school facility financing within the District, and discussion of mitigation measures to be incorporated as part of project approval.

If you have any questions, please contact me at 786-2051, Ext. 1501

Sincerely,

cc: Rich Strickland

ৱাশিংটন



SUTTER COUNTY  
COMMUNITY SERVICES DEPARTMENT

Animal Control  
Building Inspection  
Fire/Emergency Services  
Planning  
Environmental Health

Rich Hall, Director  
Dan McVey, Assistant Director  
Community Services  
Gary Kraus, Assistant Director  
Fire & Emergency Services

December 6, 1996

City of Roseville  
Planning Department  
Attn: Nela Luken  
316 Vernon Street #104  
Roseville, CA 95678

Re: Notice of Preparation for the North Roseville Specific Plan  
Draft Environmental Impact Report

Dear Ms. Luken:

Sutter County appreciates the opportunity to respond to the Notice of Preparation for the North Roseville Specific Plan Draft Environmental Impact Report. The EIR should acknowledge that the resultant urban development will contribute to a significant flooding problem in Sutter County. The EIR should identify increased storm water run off as a significant impact. The mitigation measures should not include a deferred hydrologic study as has been done in previous EIR's prepared by the City. Nor should there be a non-mandatory recommendation to participate in a regional solution to flood management. A hydrologic study should be completed as part of the impact analysis in order to determine the degree of protection that can be feasibly incorporated into the project. The EIR should also identify and provide mitigation for all traffic impacts relating to Sutter County.

Additional urban development that will contribute to an existing flooding problem in Sutter County is an impact for which mitigation will require a comprehensive and regional approach. Without the benefit of such a plan in place the flooding situation will only increase with upstream urbanization. The responsibility for achieving a solution to the impacts associated with this project lies with the City of Roseville. The regional solution should be a requirement, not a recommendation.

Sutter County has provided similar comments on previous documents prepared by the City of Roseville, recently in a letter dated March 22, 1996 responding to the preparation of an EIR for the Hewlett-Packard Master Plan and more recently in a letter dated July 16, 1996 in response to the Notice of Availability for the Regional Wastewater Treatment Service Area Master Plan EIR. In

**Ms. Nela Luken**  
**November 19, 1996**  
**Page 2**

those documents the City deferred technical studies and recommended regional solutions to the flooding problem. Sutter County did not consider the Final EIR responses to those comments adequate.

If similar responses are provided in this case, they will also be considered inadequate. Sutter County is interested in reaching a cooperative solution to this critical issue. However the continued deferral of technical studies and regional flooding solutions does not satisfy the requirements of CEQA and may result in legal challenges by Sutter County.

Please provide Sutter County with a copy of the Draft EIR as provided for in Section 15086 of the CEQA Guidelines. Thank you again for the opportunity to respond to the NOP.

Sincerely,



**RICHARDS L. HALL**  
Community Services Director

JF:rlb

cc: Larry T. Combs, County Administrative Officer  
Darrell Larsen, County Counsel  
Bob Barrett, Director, Public Works Department

A:\MISC\ROSENRS2.WPD



**PLACER COUNTY  
FLOOD CONTROL AND WATER CONSERVATION DISTRICT**

JAN WITTMER, Executive Director  
DENNIS HUFF, District Engineer  
CHRIS FERRARI, Development Coordinator  
DANI RASSON, Secretary

December 6, 1996

Nela Luken, Associate Planner  
City of Roseville  
316 Vernon Street, Suite 104  
Rocklin, CA 95678

|                   |            |         |               |            |   |
|-------------------|------------|---------|---------------|------------|---|
| Post-It® Fax Note | 7671       | Date    | 12-6-96       | # of pages | 2 |
| To                | NELA LUKEN | From    | CHRIS FERRARI |            |   |
| Co./Dept.         | Planning   | Co.     | PCFCWD        |            |   |
| Phone #           |            | Phone # | 885-7303      |            |   |
| Fax #             | 774-5129   | Fax #   |               |            |   |

**SUBJECT: North Roseville Specific Plan (NOP for a DEIR)**

Dear Nela,

This project is located in the Pleasant Grove Creek Watershed. A general assessment of flooding in this watershed is indicated in the "Auburn Ravine, Coon, and Pleasant Grove Creeks Flood Mitigation" report by CH2M HILL, June 1993.

Page 17 of the NOP states the proposed project may include rechannelization of minor tributaries, construction of pipe conveyance systems, construction of culverts and bridges, and on-site detention may occur at various locations. Page 24 indicates it is possible that persons or property within the plan area could be exposed to flooding and alterations in drainage patterns could result in additional downstream flooding. When more information is provided with site specific proposals, we request the applicant submit for our review an appropriate hydrology and hydraulic analysis in accordance with the Placer County Stormwater Management Manual which determines the impacts downstream. We encourage the applicant submit a preliminary drainage analysis for review with the Environmental Impact Report.

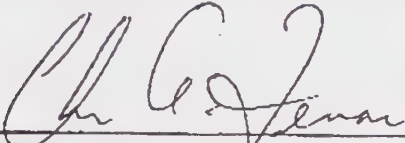
If the use of detention facilities for controlling stormwater runoff is proposed, a summary and calculations to determine the following should also be included in the Hydrology and Hydraulic analysis:

- a) An evaluation of the ability of the detention basin(s) to attenuate flood flows and a discussion of the significance of the proposed reduction of flood flows offsite of the proposed site.
- b) An assessment of whether on-site mitigation measures will aggravate flooding downstream of the project site.
- c) Identify the location of the detention ponds related to the 100-year floodplain.
- d) Utilize the HEC-1 program to determine peak flow rates.

Nela Luken  
Subject: NOP  
December 6, 1996  
Page 2

If you have any questions regarding any of my comments, please call me at 889-7303.

PLACER COUNTY FLOOD CONTROL AND  
WATER CONSERVATION DISTRICT  
JAN WITTER, EXECUTIVE DIRECTOR



---

Chris A. Ferrari, P.E.  
Development Coordinator

cc: Dennis Huff

DH:CF:DR

c:\cfproj\letters\ca06-142.wp

STATE OF CALIFORNIA—THE RESOURCES AGENCY

PETE WILSON, Governor

DEPARTMENT OF FISH AND GAME

REGION 2

1701 NIMBUS ROAD, SUITE A

RANCHO CORDOVA, CALIFORNIA 95670

(916) 358-2900



December 9, 1996

Ms. Nela Luken, Associate Planner  
City of Roseville Planning Department  
316 Vernon Street, Suite 104  
Roseville, California 95678

Dear Ms. Luken:

The Department of Fish and Game (DFG) has reviewed the Notice of Preparation for a Draft Environmental Impact Report (DEIR) for the North Roseville Specific Plan (SCH# 96112014). The North Roseville Specific Plan (NRSP) is a comprehensive plan for mixed-use development on 1,374 remaining acres on the western boundary of the City of Roseville, Placer County.

The project is non-contiguous and will be developed in two phases. Phase I consists of 732 acres of land at the northwest corner of the city limits. Phase II consists of two non-contiguous parcels, a 160-acre parcel adjacent to Phase I and immediately north of the Del Webb Specific Plan and a 482-acre parcel immediately south of Del Webb. With this DEIR, the project proponent will also be requesting general plan amendments and rezoning for Phase I, to change the land use from light industrial and urban reserve to residential, commercial, business-professional, and open space uses.

Significant biological resources in the 1,374-acre project area include the South Branch of Pleasant Grove Creek and its associated riparian habitat, oak woodlands, seasonal wetlands including northern hardpan vernal pools, and, potentially, raptor nests and State-listed and Federally-listed plants and animals associated with vernal pools.

Ms. Nela Luken  
December 9, 1996  
Page 2

The DEIR should address and mitigate for the following:

1. The project's impact upon fish and wildlife and their habitat.
2. The project's impact upon significant habitat such as riparian forests, oak woodlands, and wetlands.

Impacts to all age classes of oaks are considered significant and should be disclosed in the DEIR. Native oak trees should be protected to the maximum extent possible. Oak tree mitigation efforts should focus on extending or enhancing natural habitats.

A survey should be completed by a qualified biologist and a detailed map prepared which shows the location and quantity of stream courses and wetlands on the project site. Wetlands include, but are not limited to, areas of standing water, flood plains, intermittent and perennial drainages, vernal pools and riparian wetland vegetation. DFG is aware that wetland delineations have been completed for portions of Phase I of this project. Summary information should be included in the DEIR.

The project should be designed so that impacts to wetlands are avoided to the maximum extent possible. It should also be designed to preserve wetland parcels which are contiguous with existing wetland preserves or open space areas, rather than isolated patches which will eventually be surrounded by development. Mitigation should be provided for unavoidable impacts based upon the concept of no-net-loss of wetland habitat values or acreage.

3. The project's impact to special status species and other species of concern.

Site-specific surveys completed by a qualified biologist and botanist should be required for each phase of this project, to determine potential impacts to any threatened or endangered animal, California Species of Special Concern, or plant species which meet the criteria for rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA).



Ms. Nela Luken  
December 9, 1996  
Page 3

The DFG recommends that surveys be conducted at the time of year when endangered or threatened species are both evident and identifiable. Field surveys should be scheduled to coincide with the appropriate breeding or other life history stage of animals when they are likely to be evident, or with peak flowering periods and/or during periods of phenological development that are necessary to identify a plant species of concern. If surveys have already been completed for portions of this project, summary information should be included in the DEIR and a species list appended.

4. The project's impact upon water quality.

Water quality ponds and other Best Management Practices (BMPs) for removing pollutants and sediments from water originating from surfaced areas should be installed. The DFG does not accept stormwater detention basins as mitigation for wetland impacts. Stormwater must be treated prior to release into any wetland area.

5. The project's growth-inducing and cumulative impacts upon fish, wildlife, water quality, and vegetative resources.

Additionally, the DEIR should provide an analysis of specific alternatives which reduce impacts to fish, wildlife, water quality, and vegetative resources. DFG assumes the "Higher Density Alternative" listed on page 4 of the Initial Study has the potential to reduce impacts to wildlife habitat by concentrating residential development, thereby leaving more open space.

The applicant should be advised that work consisting of but not limited to diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream, or lake, will require notification to the DFG as required by Fish and Game Code Section 1600 et seq. The notification (with fee), and subsequent agreement, must be completed prior to initiating any such work. Notification to the DFG should be made after the project is approved by the Lead Agency. The Lead Agency is reminded that the Streambed Alteration Agreement process is not a Certified Regulatory Program per CEQA Section 21080.5 and therefore cannot be used in lieu of specific mitigation measures in the environmental document.

Ms. Nela Luken  
December 9, 1996  
Page 4

Pursuant to Public Resources Code Sections 21092 and 21092.2, the DFG requests written notification of proposed actions and pending decisions regarding this project. Written notifications should be directed to this office.

Thank you for the opportunity to review this project. If the DFG can be of further assistance, please contact Ms. Monica Parisi, Wildlife Biologist, (916) 358-2882 or Mr. David S. Zezulak, Environmental Services Supervisor, (916) 358-2929.

Sincerely,

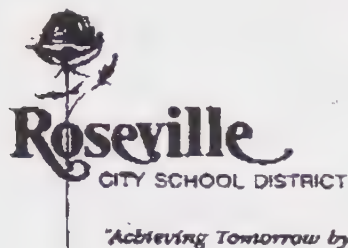


*for* Banky E. Curtis  
Regional Manager

cc: Ms. Monica Parisi  
Mr. Dave Zezulak  
Department of Fish and Game  
Rancho Cordova, California

DEC. -11' 96 (WED) 10:21

P. 001



JAMES P. ROBERTS, Ed. D.  
SUPERINTENDENT

## BOARD OF EDUCATION

Gilbert A. Duran  
Rick Gehrig      Marcia Krummell  
Kelly Lafferty      Richard Roccucci

FAX 774-5129

December 11, 1996

Nela Luken, Associate Planner  
City of Roseville  
Planning Department  
316 Vernon Street, Suite 104  
Roseville, CA 95678

Re: Notice of Preparation for a Draft Environmental Impact Report for the North  
Roseville Specific Plan

Thank you for allowing input from the Roseville City School District. There are several  
corrections to the Initial Study on page 18.

Sincerely,

Deborah Bettencourt  
Assistant Superintendent  
Business Services

DB/dh

DEC. -11' 96 (WED) 10:21

P. 002

### Schools

Two elementary schools and a junior high school are planned for Phase I, comprising of 40.7 acres of land. All three schools will be operated by the Roseville City School District. In addition, the Plan Area would be served by the new junior high school and Woodcreek High school located on Woodcreek Oaks Blvd. Developers must enter into a Tripartite Agreement to fully mitigate the impact of new students.

For Phase II, a 10-acre elementary school site is proposed in the South Urban Reserve area. This school would be in the Dry Creek Joint Elementary School District.

The Roseville High School District has identified the need for a continuation high school; such a school may be included in the Plan Area or elsewhere in the City.



## Post-it Fax Note 7672

To  
Company  
Location  
Fax #  
Comments

Adrienne

Telephone #

NOP Comments:  
Dry Creek School  
Bowl City School  
SACOG

No. of Pages

Today's Date 12/12 Time

From

Company

Nela Luken

Location

Dept. Charge

Fax #

Telephone #

Original  
Disposition:☐ Destroy☐ Return☐ Call for pickup

12/12/96

11:48

818 991 0754

SAGE INSTITUTE

002

## SII

### Sage Institute Incorporated

29800 Agoura Road, Suite 105  
Agoura Hills, California 91301  
(805) 497/8557 or (818) 991/0646  
fax (818) 991/0754  
e-mail: sage@sageinstinc.com

### MEMORANDUM

**TO:** Ms. Nela Luken, Associate Planner  
City of Roseville Planning Department

**FROM:** Dr. Joel Kirschenstein, President  
Ms. Irma Tucker, Senior Associate

**DATE:** December 12, 1996

**SUBJECT:** Response to Notice of Preparation  
Draft Environmental Impact Report for the North Roseville Specific Plan

On behalf of the Dry Creek School District ("District"), our office would like to thank you for the opportunity to review and comment upon the Notice of Preparation ("NOP") for the North Roseville Specific Plan ("Project") Draft Environmental Impact Report ("Draft EIR"). The NOP was reviewed from the perspective of the Project's environmental impact upon District facilities. It should be noted at the outset that there are no District facilities to house any students in the City of Roseville ("City") other than for those units previously approved in the Northwest Roseville Specific Plan.

#### I. PROJECT SUMMARY

##### A. APPROVALS CONTEMPLATED BY CITY

As set forth in the NOP, the Project contemplates the following approvals by the City:

1. General Plan Amendment (land use, text and policies) - to change the City's land use from light industrial and urban reserve to low and medium density residential, commercial, parks and recreation, open space, and public/quasi-public uses.

# ORIGINAL

*Roseville Planning Department*  
*Response to Notice of Preparation*  
*Page 2*

2. Specific Plan Adoption
3. Rezoning
4. Tentative Subdivision Map and Specific Plan Design Guidelines
5. Development Agreements
6. Other Ancillary Permits and Procedures

B. DEVELOPMENT WITHIN DISTRICT BOUNDARY

The South Urban Reserve Land Use Plan component of the Project consisting of the 482± acre Woodcreek West property is located within the District's boundary.

The NOP projects a total of 2,586 residential dwelling units for the Phase II development, which includes both the South and West Urban Reserve Areas. The West Urban Reserve is outside of the District's jurisdiction (see Exhibit A).

Based upon our analysis of the data set forth in the NOP for the South Urban Reserve Area Land Use Plan, an estimated 2,014± residential dwelling units are projected for development within the District (Exhibit B). A 10± acre Elementary (K-5) school site and an adjacent 12± area park site are also shown on this Land Use Plan.

The residential and other ancillary uses proposed for the South Urban Reserve are expected to create significant adverse impacts upon the District's Elementary, Middle School and Support facilities. A school mitigation agreement shall be required in order to mitigate these impacts to a less than significant level.

*Roseville Planning Department  
Response to Notice of Preparation  
Page 3*

II. SCHOOL MITIGATION

In compliance with the City's General Plan and the District's adopted policies, appropriate development conditions and school mitigation measures need to be specifically addressed in the draft EIR and for any Project approvals contemplated by the City in order to mitigate the degree of impact upon District facilities. The Project's potential adverse impact toward the delivery of existing coordinated joint-use education, community facilities, parks, and community service program to families residing within the District boundaries needs to be mitigated prior to Project approval.

The NOP also states that several alternatives to the proposed Project will be examined in the EIR. The level of potential impact from any of the Project alternatives needs to be quantified and appropriate mitigation measures formulated in order that the resulting impact upon District facilities be reduced to less-than-significant levels.

III. CONCLUSION

In conclusion, and based upon the foregoing, the District hereby requests that the following policies be incorporated into the Project:

- A. That K-5 and 6-8 school facilities be provided for;
- B. That a K-5 school site which is acceptable to the District and the California Department of Education be provided within the Project area.
- C. That a school mitigation agreement be required in order to adequately house students generated by the Project in future District facilities.

*Roseville Planning Department  
Response to Notice of Preparation  
Page 4*

The District will continue to work with both the City and developers in a prudent and forthright manner in order to mitigate potential impacts upon District facilities resulting from the Project.

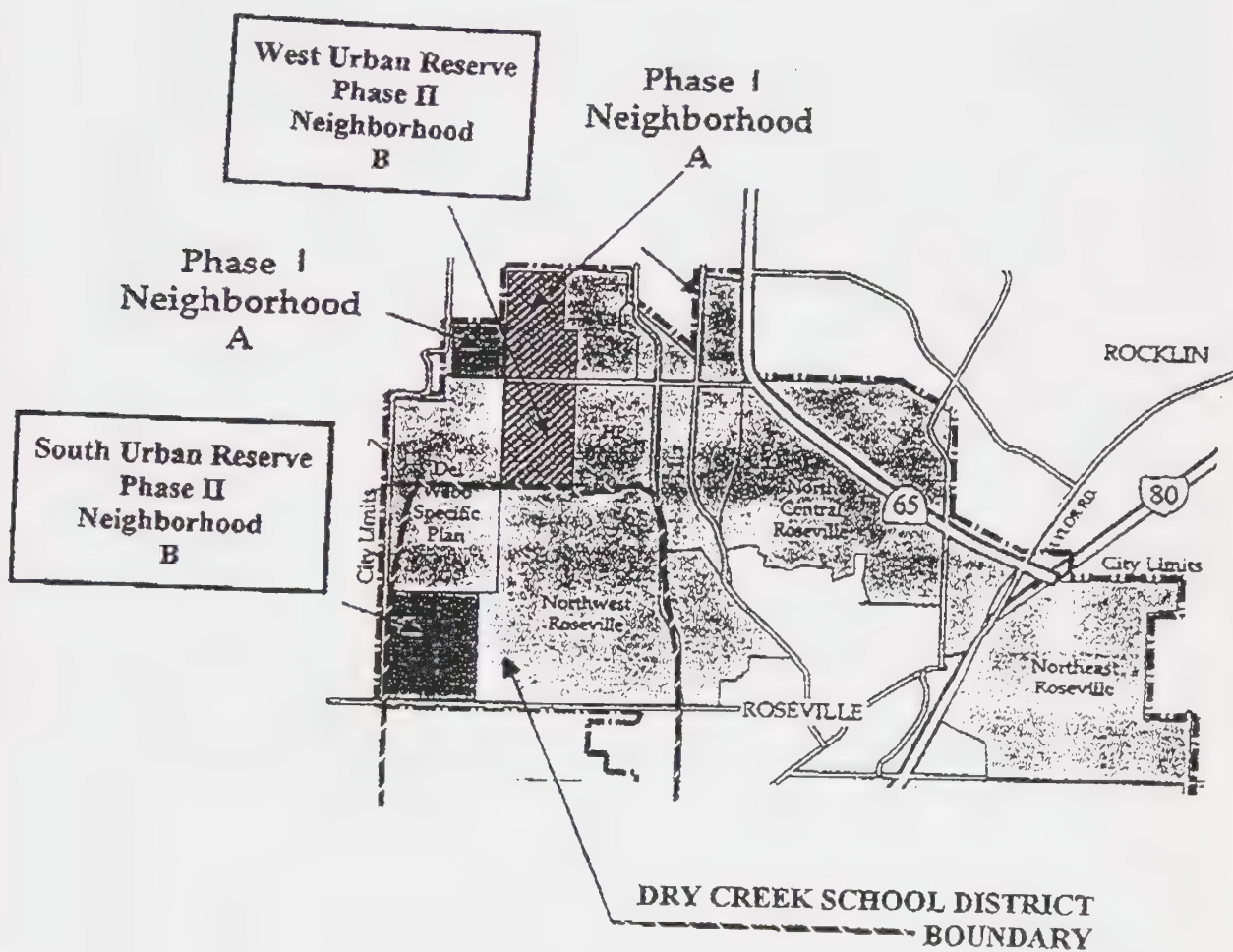
Please continue to provide notice to both the District and our office of: a) any future meetings and/or public hearings to be scheduled regarding the Project, and b) requests for review and comment upon the draft EIR and any other documents pertaining to the Project.

Attachments:       Exhibit A  
                          Exhibit B

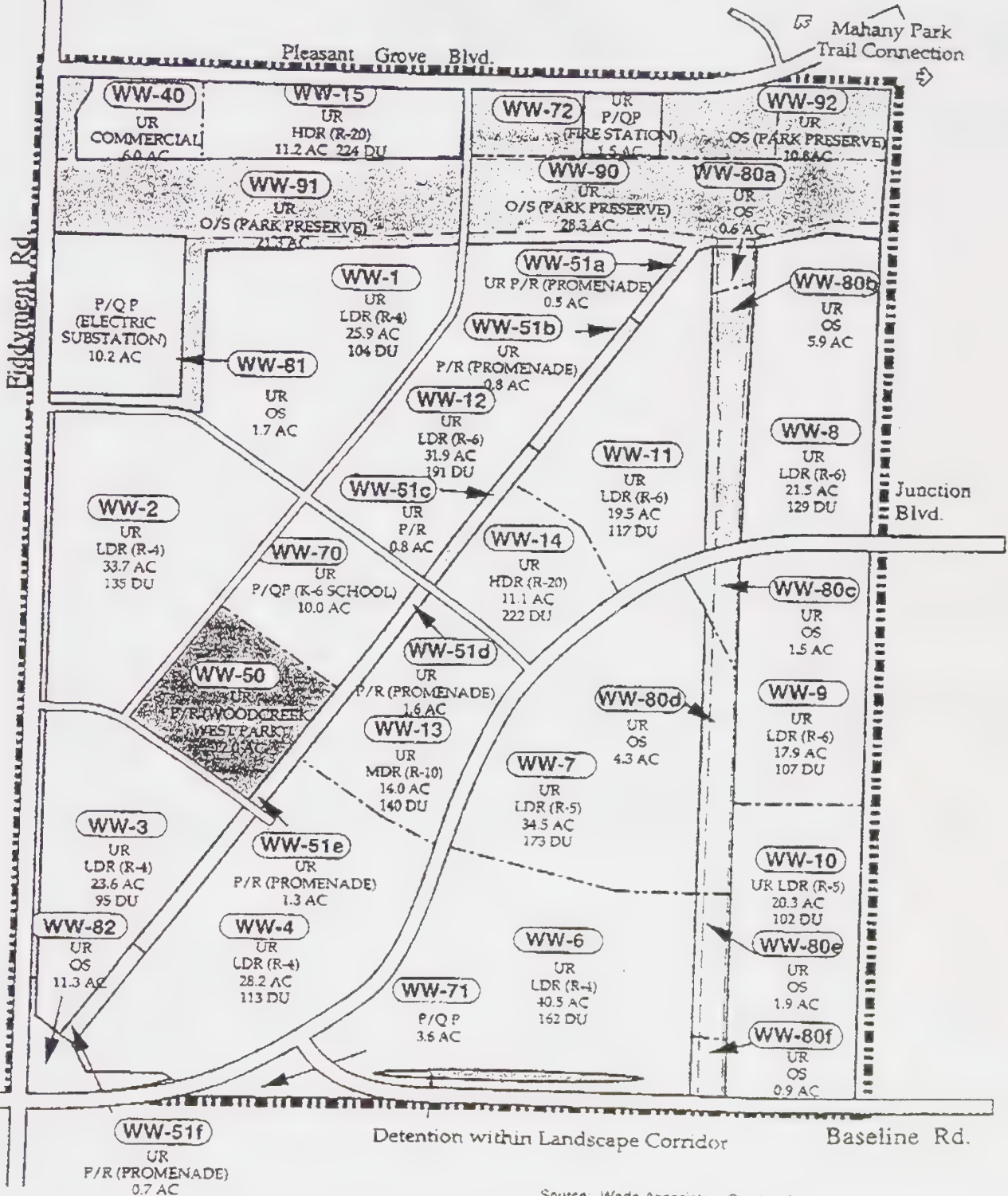
cc:     District Board of Trustees  
          Mr. Kelvin Lee, District Superintendent

D:\SAGE\DRY CREEK\NOP.MEM









Source: Wade Associates, October 2, 1996

15 Figure 5 South Urban Reserve Land Use Plan

EXHIBIT B







**Sacramento Area Council of Governments**  
3000 "S" Street, Suite 300, Sacramento, California 95816

**RECEIVED**

**DEC 12 1996**

**PLANNING DEPARTMENT**

December 10, 1996

Nela Luken  
Associate Planner  
City of Roseville, Planning Department  
316 Vernon Street, Suite 104  
Roseville, CA 95678

Subject: Comments on Notice of Preparation of a Draft Environmental Impact Report for the North Roseville Specific Plan

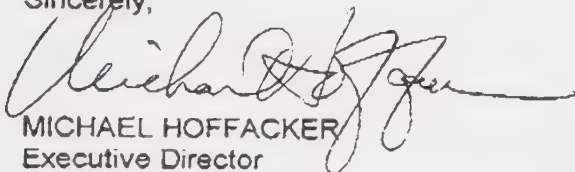
Dear Ms. Luken:

Thank you for the opportunity to review the Notice of Preparation of a Draft EIR for the North Roseville Specific Plan.

We reviewed the document primarily for whether or not the regional transportation impacts of the North Roseville Specific Plan were addressed. Of particular interest to SACOG is the design that could accommodate light rail in a route along Roseville Parkway and Blue Oaks Boulevard. The environmental impacts of this light rail route should be analyzed as part of the study.

We look forward to reviewing a copy of the draft Environmental Impact Report when it is issued. Please contact Nancy Kays of the Transportation and Air Quality Section, who is SACOG's Placer County liaison (457-2264), with any questions.

Sincerely,

  
MICHAEL HOFFACKER  
Executive Director

MH:NK:ng

S:\SHARED\LUKEN.LTR



---

---

***APPENDIX B***  
***DISTRIBUTION LIST***

---

---





**NORTH ROSEVILLE SPECIFIC PLAN  
DRAFT EIR DISTRIBUTION LIST  
MAY 1997**

D = Document  
N = Notice of Availability  
C = Certified

**CITY OF ROSEVILLE**

- D   (2) Attorney's Office, Mark Doane, 311 Vernon Street, #202
- D   (1) Building Division, Gene Paolini, 321 Vernon Street, #108
- D   (1) City Manager, Al Johnson, 311 Vernon Street
- D   (1) Clerk's Office, Carolyn Parkinson, 311 Vernon Street, #208
- D   (2) Community Development Department, Steve Dillon, Mark Morse 316 Vernon Street, #102
- D   (3) Electric Department, Dave Dockham, Mike Brozo, Jerry Roemmelt, 2090 Hilltop Road
- D   (5) Environmental Utilities, Derrick Whitehead, Kelye McKinney, Terry Bosik, Ed Kriz, Larry Buckle,
- D   (2) Fire Department, Bill White, Ron Phillips, 401 Oak Street, #400
- D   (1) Housing and Redevelopment Dept., John Sprague, 405 Vernon Street, Suite 1
- D   (2) Main Library (Public Information), Sue Nickerson, 225 Taylor Street
- D   (2) Maidu Branch Library (Public Information), Gail Cooper, 1530 Maidu Drive
- D   (1) Parks and Recreation, Mike Shellito, 401 Vernon Street, #B
- D   (2) Police Department, Thomas Simms, Dee Dee Gunther, 401 Oak Street, #400
- D   (1) Public Information, Marilyn Bartell, 311 Vernon Street
- D   (2) Public Works Department, Heidi Dwyer, Jeannie Gandler, Susan Grenda, 316 Vernon Street, #100
- D   (3) Public Works Department, Larry Pagel, Rob Jensen, Rhon Herndon, 316 Vernon Street, #100
- D   (3) Planning Department, Patty Dunn, Dan Dameron, Nela Luken

**ROSEVILLE CITY COUNCIL**

- D   (5) c/o City Clerk, 311 Vernon Street, #208

**ROSEVILLE PLANNING COMMISSION**

- D   (7) c/o Planning Department, 316 Vernon Street, #104

**ROSEVILLE TRANSPORTATION COMMISSION**

- D   (5) c/o Public Works Department, 316 Vernon Street, #100

**CITY OF FOLSOM**

- N   Folsom Community Development Dept, 300-D Persifer Street, Folsom, CA 95814

**CITY OF LINCOLN**

- D   Lincoln Community Development Dept, Rodney Campbell, 1530 Third Street, Suite 111, Lincoln, CA 95648

**TOWN OF LOOMIS**

- D   Loomis Planning Department, Kathy Kerdus, P.O. Box 1327, Loomis, CA 95650

**CITY OF ROCKLIN**

- D   Rocklin City Manager's Office, Carlos Urrutia, P.O. Box 1328, Rocklin, CA 95677
- D   Rocklin Community Development Department, Terry Richardson, P.O. Box 1328, Rocklin, CA 95677
- D   Rocklin Public Works Department, Archie Moosakhanian, P.O. Box 1138, Rocklin, CA 95677

N   Sacramento County Planning Dept, Tom Hutchings, 827 7th Street, Room 230, Sacramento, CA 95814

D Sutter County Planning Department, P.O. Box 1555, Yuba City, CA 95992

  N   Sutter County Flood Control District, P.O. Box 1555, Yuba City, CA 95992

D P.C.T.P.A., Tim Douglas, 853 Lincoln Way, #109, Auburn, CA 95603

D Placer County Air Pollution Control District, 11464 "B" Ave, Auburn, CA 95683

D Placer County Flood Control and Water Conservation Dist., Dennis J. Huff, 11444 "B" Ave, Auburn, 95603

D Placer County Planning Department, Fred Yeager, 11414 "B" Ave, Auburn, CA 95603

  D   Placer County Public Works Department, 11444 "B" Ave, Auburn, CA 95603

L Placer Co. Resource Conservation Dist, Richard Gresham, 251 Auburn Ravine Rd, Ste 201 Auburn, 95603

D (15) Office of the Governor, State Clearinghouse, 1400 10th Street, Room 121, Sacramento, CA 95814

  L   (1) Office of Permit Assistance, 801 K Street, Suite 1600, Sacramento, CA 95814

D (1) Caltrans District 3, P.O. Box 942874-MS-41, Sacramento, CA 94274-0001

D (1) CA Dept. of Fish & Game, Monica Parisi, 1701 Nimbus Road, Suite A, Rancho Cordova, CA 95670

N US Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105-3901

D US Fish and Wildlife Service, Ecological Division, Mike Aceituno, 2800 Cottage Way, Room E-1803,  
Sacramento, CA 95825

D US Army Corps of Engineers, Tom Coe, P.E. 1325 J Street, Sacramento, CA 95814-2922

N U.S. Post Office, Superintendent of Mail, 324 Vernon Street, Roseville, CA 95678

D Roseville City School District, Mark Schrader, 1000 Darling Way, Roseville, CA 95678

D Roseville Joint Union High School District, Denny Jones, 1750 Cirby Way Roseville, CA 95661

D Dry Creek Elementary School District, Superintendent, 9707 Cook Riolo Rd, Roseville, CA 95747

D- Jones Intercable, Kathy Dean, 501 Guiseppe, Roseville, CA 95678

D (2) PG&E, Service Planning, Robert Fratini, 151 North Sunrise Ave, Ste 513, Rsvl, 95661

D (2) Roseville Telephone Company, Judee Clawson/J.Poulsen, 200 Vernon, Roseville, CA 95678

N N.C.P.A., Michael McDonald, 180 Cirby Way, Roseville CA 95678

N Western Area Power Administration, Earl Nelson, 1825 Bell Street, Sacramento, CA 95825

D South Placer Municipal Utility District, P.O. Box 45, Loomis, CA 95650

N Sacramento Area Flood Control Agency, Tim Washburn, 926 "J" Street, Suite 424, Sacramento, CA 95814

D P.C.L.A.F.C.O. - Placer Co., Debra Cuberly, 175 Fulweiler Avenue, Auburn, CA 95603

D Building Industry Association (BIA), 3780 Rosin Court, Suite 290, Sacramento, CA 95834

D California Native Plant Society, 1441 Spring Valley Dr., CA 95661

N Placer County Facilities Services, Solid Waste Division, Will Dickerson, 11476 C Ave., Auburn, CA 95603

D Roseville Chamber of Commerce, Wendy Gerig, 650 Douglas Boulevard, Roseville, CA 95678

D Sacramento Area Council of Governments (SACOG), 3000 "S" Street, Suite 300, Sacramento, CA 95816

D Sierra Club Mother Lode, P.O. Box 1335, Sacramento, CA 95812-1335

D Sierra Club, the Placer Group, Attention: Lynne Roberts, 1212 McKinley Drive, Roseville, CA 95661

D SMAOMD, Nancy Ormandy, 8411 Jackson Road, Sacramento, CA 95826

L Office of Economic Development, Ed Graves, 175 Fulweiler Ave., Auburn, CA 95603

## NEWSPAPERS

- ☐ D Neighbors, 3628 Madison Avenue, #1, North Highlands, CA 95660
- ☐ D The Placer Herald, 5903-B Sunset Boulevard, Rocklin, CA 95677
- ☐ D Roseville Press Tribune, 188 Cirby Way, Roseville, CA 95678
- ☐ D Sacramento Bee, South Placer Bureau, 106 North Sunrise Avenue, Suite B-8, Roseville, CA 95661
- ☐ D Auburn Journal, 1030 High St., Auburn, CA 95603
- ☐ D Business Journal, Mark Larson, 11401 21st Street, Sacramento, CA 95814
- ☐ D George Brown, 7117 Walerga Rd., #8, Sacramento, CA 95842

## OTHER INTERESTED PARTIES

- ☐ D Stephen DesJardin, Diamond Creek Partners, 191 Diamond Oaks Blvd., Roseville, CA 95678
- ☐ D Randy Collins, SARES Company 1425 River Park Dr., Ste 530, Sacramento, CA 95815
- ☐ D John Mourier & Steven Schnabel, John Mourier Construction, Inc., 1830 Vernon Str., Ste. 9, Roseville, CA 95678
- ☐ D Connie Banterson, Eskaton, 5105 Manzanita Ave., Carmichael, CA 95608
- ☐ D Adrienne Graham, EIP Associates, 1200 Second St., Ste. 200, Sacramento, CA 95814
- ☐ D Tim Taron, Hefner, Stark & Marois, 2710 Gateway Oaks Dr., Ste. 300 So., Sacramento, CA 95833-3501
- ☐ N Kent Baker, Kent Baker & Associates, 7996 California St., Ste C, Fair Oaks, CA 95628
- ☐ D John Long, DKS Associates, 8950 Cal Center Dr., Suite 340, Sacramento, CA 95826-3259
- ☐ D Steve Thurtle, Balcor, 2240 Douglas Blvd., Suite 120, Roseville, CA 95661
- ☐ N Sugnet & Associates, Bill Sugnet, 2260 Douglas Blvd., Roseville, CA 95661
- ☐ D David Wade, Wade Associates, 2140 Professional Dr., Suite 140, Roseville, CA 95661
- ☐ D HP, Mark Nelson, 8000 Foothills Blvd., MS 5608, Roseville, Ca 95747-5608
- ☐ D Del Webb, Kevin Payne, 198 Cirby Way, Roseville, Ca 95678
- ☐ D Law Offices of George Phillips, Chris Steward, 555 University Ave #200, Sacramento, CA 95825
- ☐ D Paul Sevy, c/o Simeon Properties, 655 Montgomery St., Ste 1190, San Francisco, CA 94111
- ☐ D Marcus LoDuca, 3017 Douglas Blvd., #300, Roseville, CA 95661
- ☐ D Community Relation Committee, c/o Sun City Roseville Community Association, 7050 Del Webb Blvd., Roseville, CA 95747
- ☐ N Bill Fastiggi, 200 Shelley Court, Roseville, CA 95747
- ☐ N Property Owner's within 300 feet of the project.

E: LUKEN\NRSP\EIR\DEIRDIST.DOC





---

---

***APPENDIX C***  
***GENERAL PLAN POLICIES***

---

---



---

---

## *APPENDIX C*

### *GENERAL PLAN POLICIES*

---

---

#### **C.1 INTRODUCTION**

The purpose of this appendix is to provide a listing of General Plan policies which are applicable to the Proposed Project.

Sections 65359 and 65454 of the California Government Code require that a Specific Plan be consistent with the local jurisdiction's General Plan. General Plan policies are presented in *italics*, in the order in which they appear in the General Plan. All nine General Plan elements (and policies thereof) are broken down into subsections. These subsections are identified by **bold** print and are located at the left margin of each page.

For policies which are permissive, the Proposed Project would not be found inconsistent unless it would clearly impede the intent of the policy. If the Proposed Project would not satisfy every particular of a given policy, but generally meets the intent of the policy, it would not be found inconsistent. If the Proposed Project, before mitigation, would not meet these criteria and is found in conflict with a policy, it is considered inconsistent.

#### **C.2 LAND USE**

##### Community Form -- General Policies (LA)

- Policy LA-1.     *The City of Roseville shall ensure high quality development in new and existing development areas as defined through its specific plans, development review process and design guidelines.*
- Policy LA-2.     *The City, through both public and private efforts, shall develop clearly defined entries at major entrances into the City through the use of open space, landscaping, signage and other distinctive elements as a way of defining the City's boundaries and identity.*
- Policy LA-3.     *The City shall continue to provide a full range of public services and maintain high levels of service, as specified in other elements of this Plan, including the Public Facilities, Open Space and Conservation, Safety, Circulation and Parks and Recreation Elements.*

- Policy LA-4. *The City shall promote a diversity of residential living options (e.g. density ranges, housing types, affordability ranges) while ensuring community compatibility and well-designed residential development.*
- Policy LA-5. *The City shall promote land use patterns that result in the efficient use of urban lands and preservation of open space as specified in the Open Space and Conservation Element.*
- Policy LA-6. *The City shall, through development approvals and City programs (e.g. redevelopment, capital improvement program, parks and recreation programs, etc) assure that all portions of the community are linked and integrated.*

Community Form -- Relationship to Transit, Pedestrian, Air Quality Policies (LB)

- Policy LB-1. *The City shall promote land use patterns that support a variety of transportation modes and accommodate pedestrian mobility.*
- Policy LB-2. *The City shall allow for land use patterns and mixed use developments that integrate residential and non-residential land uses, such that residents may easily walk or bike to shopping, services, employment and leisure activities.*
- Policy LB-3. *The City shall concentrate higher intensity uses and appropriate support uses within close proximity of transit and bikeway corridors as identified in the Transit Opportunity and Bikeway Master Plans. In addition, some component of public use such as parks, plazas, public buildings, community centers and/or libraries shall be located within the corridors.*
- Policy LB-6. *The City, through its land use planning and development approvals, shall require that neighborhood serving uses (e.g. neighborhood commercial uses, day care, parks, schools and other community facilities) be physically linked with adjacent residential neighborhoods.*

Community Form -- Downtown Neighborhood Policies (LC)

- Policy LC-2. *The City shall promote land use patterns that result in the dispersion of secondary or satellite services including libraries, schools, parks, public meeting places and commercial uses, throughout the community through the establishment of clustered community centers.*

Community Form -- Relationship of New Development Policies (LD)

- Policy LD-1. *The City shall require that new development areas and associated community-wide facilities (open space resources, parks, libraries, etc) be linked and oriented to existing developed areas of the community, through road networks, public transit systems, open space systems, bikeway and pedestrian systems, and other physical connections.*



Community Form -- Jobs/Housing and Economic Development Policies (LE)

- Policy LE-1. *The City shall strive for a land use mix and pattern of development that provides linkages between jobs and employment uses, will provide a reasonable jobs/housing balance, and maintain the fiscal viability of the City.*
- Policy LE-2. *The City shall support density bonuses for the construction of affordable housing, in accordance with the Density Bonus ordinance and the Housing Element, particularly in areas where few such opportunities exist and significant employment centers exist or are planned.*
- Policy LE-3. *The City shall establish a standard process to analyze the fiscal impacts of proposed development and shall require a fiscal impact analysis of all projects proposing a significant General Plan land use change as defined through the Economic Development Study/Plan.*
- Policy LE-5. *The City shall maintain land use patterns, intensities and densities that promote a positive business climate (e.g. supply of business professional, commercial and industrial lands).*
- Policy LE-6. *The City shall support activities that attract employment uses to the City as identified in the Economic Development Study/Plan.*

Community Form -- Community Involvement and Interjurisdictional Cooperation Policies (LF)

- Policy LF-1. *The City shall encourage active involvement by individuals and citizens in the planning process through on-going public participation opportunities and information programs.*
- Policy LF-2. *For major development proposals (e.g. General Plan amendments, adoption of specific plans and amendments), the City shall encourage and provide public participation opportunities at early stages in the process.*
- Policy LF-4. *The City shall, to the extent feasible, coordinate land use policies and public improvements with neighboring jurisdictions.*
- Policy LF-5. *The City shall encourage early consultation with, and shall refer development proposals that may have an impact to, adjacent jurisdictions for review and comment. The City shall respond and comment on development proposals that are received from other jurisdictions that may have an impact on Roseville, to minimize such impacts and insure consistency and compatibility with existing and planned development in the City.*

Community Design Policies (LG)

- Policy LG-1. *Through the design review process, the City shall apply design standards that promote the use of high quality building materials, architectural and site designs, landscaping, signage, and amenities.*
- Policy LG-2. *The City shall continue to develop and apply design standards that result in efficient site and building designs, pedestrian friendly projects that stimulate the use of alternative modes of transportation, and the establishment of a functional relationship between adjacent developments.*
- Policy LG-3. *The City shall encourage designs that strike a balance between the incorporation of aesthetic and development requirements, and the economic considerations associated with development.*
- Policy LG-4. *The design review process shall promote flexibility in achieving design objectives, and encourage projects with innovative, unique and creative architectural style and design.*
- Policy LG-5. *The City shall encourage, promote and support art in public spaces and programs to enhance the design of the City.*
- Policy LG-6. *Through the design review process, encourage site and building designs that are in scale and compatible with adjacent development, with respect to height, bulk, form, mass, and community character.*
- Policy LG-7. *Encourage project designs that place a high priority and value on open space, and the preservation, enhancement and incorporation of natural resources and other features including consideration of topography, vegetation, wetlands, and water courses.*
- Policy LG-8. *Encourage and promote the preservation of historic and/or unique, culturally and architecturally significant buildings, features and visual environments.*
- Policy LG-9. *The location and preservation of native oak trees and oak woodlands shall be a primary factor in determining site design, building location, grading, construction and landscaping, and in establishing the character of projects through their use as a unifying element in both new and existing development.*

Growth Management -- General (LH)

- Policy LH-1. *Growth must provide a strong diversified economic base and a reasonable balance between employment and affordable housing.*
- Policy LH-2. *Growth must occur on the basis that projected revenue should be sufficient to meet public costs.*
- Policy LH-3. *The City shall encourage a development pattern that is contiguous with existing developed areas of the City.*
- Policy LH-4. *Growth shall be managed to ensure that adequate public facilities and services, as defined in the Public Facilities Element, are planned and provided and the public health, safety and welfare is protected.*
- Policy LH-5. *The City shall accommodate projected population and employment growth in areas where the appropriate level of public infrastructure and services are planned or will be made available concurrent with development.*
- Policy LH-6. *The City shall use the specific plan process to ensure a comprehensive, logical growth process for new development areas (e.g. urban reserve, annexations) or any areas where significant land use changes are considered.*
- Policy LH-7. *The City shall oppose urban density residential, commercial or industrial development in unincorporated areas unless adequate public facilities and services can be provided and mechanisms to ensure their availability and provision are secured during the land use entitlement process. It is the City's preference that urban development occur within incorporated areas.*
- Policy LH-8. *Growth shall be managed in such a way to ensure that significant open space areas will be preserved.*

Growth Management -- Land Use Allocation Policies (LI)

- Policy LI-1. *The City shall, through its land use planning process, capital improvement plans, and facility and service programs, provide for a land use allocation of 39,200 dwelling units (inclusive of the 1,000 unit pool) and non-residential entitlements as designated on the General Plan land use map.*
- Policy LI-2. *The City shall maintain a pool of 1,000 residential units to be allocated for City sponsored and State mandated programs (e.g. second units, density bonuses for affordable housing, redevelopment, annexations of the Livoti and/or Annabelle areas to complete corporate boundaries as reflected on Figure 1) to be utilized in areas where existing development entitlements exist or to further City affordable housing goals.*



Policy LI-3. *The City shall review, and if necessary, modify, the 1,000 unit pool in conjunction with regular updates of the Housing Element, and concurrent with any significant modification to the General Plan resulting in the allocation of additional residential units.*

Growth Management -- Growth Areas Policies (LJ)

Policy LJ-1. *The City may consider modifications to the General Plan land use allocation to provide the following:*

- a. need for additional land to meet the demand for housing and/or employment uses;*
- b. ability to provide adequate public services and facilities;*
- c. potential for public transit service;*
- d. preservation and conservation of natural and environmental features; or*
- e. projects that will provide benefit to the City.*

Policy LJ-2. *Prior to the consideration of any General Plan amendment to modify the land use allocation or expand the City's boundaries or sphere of influence, the City shall complete or cause to be completed the following City-wide studies/plans:*

- a. Long-Range Transit Plan*
- b. Economic Development Study/Plan*
- c. Public Facilities and Services Capacity Study*
- d. Transportation System Capacity Study*

*The studies shall define overall holding capacities and identify additional performance standards that will need to be met to ensure the achievement of the goals and policies of the General Plan.*

Policy LJ-3. *The following City-wide studies/plans shall be completed prior to June 30, 1993, or the approval of the first specific plan to modify the General Plan land use allocation, whichever comes first:*

- a. Master Bikeway Plan*
- b. Transit Opportunity Plan*
- c. Light Rail Funding Plan*
- d. Community Design Guidelines*
- e. Parks Master Plan*

Policy LJ-4. *The City shall require the submittal of a specific plan for the consideration of new development areas or any areas where a significant modification to the General Plan land use allocation is proposed. The specific plan process shall, at a minimum, include the following:*



- a. *General Plan Amendment*
- b. *Development Agreement*
- c. *Zoning Entitlements*
- d. *Environmental Impact Report*
- e. *Phasing, Financing, Capital Improvements Plan*
- f. *Fiscal Impact Analysis*

Policy LJ-5. *Specific plans will be evaluated based on the following minimum criteria:*

- a. *Government Code requirements for specific plans*
- b. *demonstrated consistency with General Plan goals and policies*
- c. *demonstrated consistency with the identified City-wide studies and holding capacity analysis*
- d. *justification for proposed specific plan boundaries*
- e. *community benefit*
- f. *ability to mitigate impacts*
- g. *impact on the City's growth pattern*

*Each specific plan proposal shall include, with its initial submittal, a full analysis of how the plan complies with and relates to the above factors. The specific plans' consistency with the General Plan, and its relation to other identified criteria, will be a primary factor in determining whether the proposal will or will not be considered by the City.*

#### Growth Management -- Urban Reserve Policies (LK)

Policy LK-1. *The City may determine, in accordance with the goals and policies of this element, that it is appropriate to amend its General Plan land use allocation and expand into an urban reserve areas(s). Under such circumstances, a specific plan will be required to comprehensively plan each of the areas listed below and reflected on Figure 2:*

- a. *North Central Roseville Specific Plan urban reserve*
- b. *Northeast Roseville Specific Plan urban reserve*
- c. *Northwest Roseville Specific Plan urban reserve*
- d. *West Roseville urban reserve*
- e. *North Roseville urban reserve*

Policy LK-3. *In addition to being consistent with the other goals and policies of the General Plan, the specific plan for each of the identified urban reserve areas shall comply with the following:*

- a. *A public focal point, community, and/or theme feature shall be provided in each urban reserve area. These features shall be specific to each area and be designed to contribute to the promotion and enhancement of community character. A special*

*feature may include, but is not limited to, a community plaza, central park, or some other type of gathering area; outdoor amphitheater; community garden; regional park with special facilities; sports complex; or cultural facilities.*

- b. Entryways shall be provided at entrances to the City in accordance with the Community Design Guidelines. Where possible, the entryways shall take advantage of and incorporate existing natural resources into the entry treatment. The specific plans shall identify the location and treatment of the entryways, and shall consider the use of open space, oak regeneration areas, signage and/or special landscaping.*
- c. The urban reserve specific plan areas shall be planned and oriented to be an integral part of the City consistent with the policies of the Community Form Component of this element.*
- d. Design guidelines, specifying screening and a transition between public utilities (e.g. substations, pump stations) and other uses, shall be developed in conjunction with the public utility departments and agencies. In addition, development along power line and pipeline easements shall incorporate design treatment to insure compatibility and safety. Design guidelines and treatment may include minimum setbacks, building and landscape design standards and possible limitations on certain types of uses and activities.*
- e. Where they exist, and where feasible, natural resource areas shall be preserved along new roadways. Such roadways may create a public boundary between the resource area and other uses. The specific plans shall identify locations and standards for the preservation of natural resources along roadways, and shall identify sources of financing for such road segments.*
- f. The specific plans shall include a resource mitigation/banking plan to be developed in accordance with the provisions of the Open Space and Conservation Element.*

Policy LK-6. *The specific plans for the Northwest (as applicable), West Roseville, and North Roseville urban reserve areas shall comply with the following supplemental policies:*

- a. Development and design options for the areas along Baseline and Fiddymont Roads should be indicated, and to the extent feasible and desirable, be coordinated and compatible with adjacent land uses. This includes the rural residential uses south of Baseline.*

*The standards identified in the Northwest Roseville Specific Plan for Baseline Road shall be used as a minimum for treatment along both roadways to establish continuity. These standards should include minimum setbacks, landscape requirements, buffering and building design standards.*

- b. Development and design options for the areas adjacent to the North Industrial Area shall provide adequate separation from existing and planned industrial uses. The specific plan shall include standards considering type of uses, setbacks and other design considerations. The standards shall be coordinated with the North Industrial Design Guidelines.*
- c. Existing oak trees and woodlands shall be incorporated as an integral part of the design treatment in the areas.*
- d. Pleasant Grove and Kaseberg Creeks shall be preserved as specified and generally mapped in the Open Space and Conservation Element. The precise boundaries and exact method of preservation shall be identified in the specific plan.*
- e. A City-wide park shall be developed in the West Roseville urban reserve area which provides a community theme or focus for the specific plan area it is within. The community theme component of the park may include, but is not limited to, the preservation of oak woodlands, the development of a community center, town plaza, or amphitheater.*

#### Growth Management -- Annexations and Sphere of Influence (LL)

- Policy LL-1. *The City may initiate studies to investigate the potential of (1) annexing areas within its sphere of influence; and (2) expanding its sphere of influence boundaries. The studies should be focused on those areas that, both long and short term, may effect General Plan goals and policies and that would be logically served and planned by the City. The studies shall include the identification, availability and funding of public services, as well as the costs and impacts to the City and other service providers. Issues to be analyzed include, but are not limited to, present and planned land uses, water, sewer, electric, library, parks, schools, circulation and affordable housing. Based on these studies, and resident and property owner input, the City may take steps to annex or expand its sphere of influence.*



- Policy LL-2.     *The City may consider annexations that:*
- a. are contiguous with City boundaries and provide for a logical expansion of the City;*
  - b. create clear and reasonable boundaries;*
  - c. ensure the provision of adequate municipal services;*
  - d. are beneficial from a fiscal standpoint to the City and its residents;*
  - e. are consistent with State law and Placer County Local Agency Formation Commission (LAFCO) standards and criteria;*
  - f. are consistent with the General Plan.*
- Policy LL-3.     *The City may consider expanding its sphere of influence to incorporate areas that, in the future, should be logically planned and serviced by Roseville. The City shall consider the following factors, as identified by LAFCO, when making determinations involving sphere of influence boundaries:*
- a. Present and planned land uses in the area;*
  - b. Present and probable need for public facilities and services in the area;*
  - c. Present capacity of public facilities and adequacy of public services;*
  - d. Existence of any social or economic communities of interest in the area; and*
  - e. Open space and agricultural lands.*

### **C.3 CIRCULATION POLICIES**

#### **Functional Classification Policies (CA)**

- Policy CA-1.     *Establish a functional classification system to guide the planning and design of the City's roadway system.*
- Policy CA-3.     *Establish a comprehensive set of design standards for the City's roadway system by functional class.*
- Policy CA-4.     *Maintain a system of truck routes to provide for the safe and efficient movement of goods and to avoid impacting residential neighborhoods.*

#### **Level of Service Policies (CB)**

- Policy CB-1.     *Maintain a level of service (LOS) "C" standard for all intersections and roadway segments in the City. Exceptions to that standard may be considered where the City finds that the required improvements are unacceptable based on established criteria.*



- Policy CB-2. *Strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.*
- Policy CB-4. *Secure adequate funding for all components of the City's transportation system to ensure level of service policy is maintained.*

Transit Policies (CC)

- Policy CC-1. *Pursue and support transit services within the community and region, and shall pursue land use, design and other mechanisms which promote the use of such services.*
- Policy CC-5. *Consider the transit needs of senior, disabled, minority, low-income, and transit dependent persons when making decisions regarding transit service.*

Transportation System Management Policies (CD)

- Policy CD-1. *The City shall continue to enforce its TSM ordinance and monitor its effectiveness.*

Bikeways/Trails Policies (CE)

- Policy CE-1. *Develop a comprehensive and safe system of recreational and commuter bicycle routes and trails that provides connections between the City's major employment and housing areas and between its existing and planned bikeways.*
- Policy CE-2. *Coordinate its bikeway and trail system with those of neighborhood jurisdictions.*
- Policy CE-3. *Pursue available sources of funding for bikeways and trails.*

**C.4 AIR QUALITY -- POLICIES**

Air Quality -- General Policies (AA)

- Policy AA-3. *The City shall develop consistent and accurate procedures for evaluating the air quality impacts of both new and existing projects.*
- Policy AA-4. *The City shall develop mitigation measures to minimize stationary and area source emissions.*

Air Quality -- Transportation and Circulation Related Policies (AA)

- Policy AA-5.     *The City shall develop transportation systems that minimize vehicle delay and air pollution.*
- Policy AA-6.     *The City shall develop consistent and accurate procedures for mitigating transportation emissions from new and existing projects.*
- Policy AA-7.     *The City shall encourage alternative modes of transportation including pedestrian, bicycle and transit usage.*

Air Quality -- Land Use Related (AA)

- Policy AA-8.     *The City shall separate air pollution-sensitive land uses from sources of air pollution.*
- Policy AA-9.     *The City shall encourage land use policies that maintain and improve air quality.*

Air Quality -- Energy Conservation Related Policies (AA)

- Policy AA-10.    *The City shall conserve energy and reduce air emissions by encouraging energy efficient building designs and transportation systems.*

Air Quality -- Hazardous Materials Related Policies (AA)

- Policy AA-11.    *The City shall protect its residents from the risks involved in the transport, distribution, storage, use, and disposal of hazardous materials.*

**C.5    OPEN SPACE AND CONSERVATION -- POLICIES**

Open Space System (OA)

- Policy OA-1.     *Provide an interconnecting system of open space corridors which, where feasible, incorporate bikeways and pedestrian paths.*
- Policy OA-2.     *Provide interconnected open space corridors between open space and habitat resources, recreation areas, schools, employment, commercial services and residential areas.*
- Policy OA-3.     *Work with adjacent jurisdictions to connect the City with regional open space and trail systems, providing a network of open space and habitat resources, pathways and, where reasonable, equestrian trails, through the City to link nearby communities.*

- Policy OA-4. *All new development shall be required to provide linkages to existing and planned open space systems. Where such access cannot be provided through the creation of open space connections, alternative linkages shall be identified.*
- Policy OA-5. *Provide access to public open space resources except in those areas determined by the City to be sensitive to human presence.*
- Policy OA-6. *Consideration of natural habitat areas, shall be taken into account in developing linkages and in preserving open space areas. Alternate sites for linkages shall be identified where sensitive habitat areas have the potential to be adversely impacted.*
- Policy OA-7. *The City shall maximize opportunities for preservation and maintenance of open space resources, including establishment of private open space areas and coordination with non-profit organizations.*
- Policy OA-8. *Provide opportunities for public education through the City's public open space system, natural resource areas, and parks and recreation facilities.*

Vegetation and Wildlife (OB)

- Policy OB-1. *Incorporate existing trees into development projects, and where preservation is not feasible, continue to require mitigation for the loss of removed trees. Particular emphasis shall be placed on avoiding the removal of groupings or groves of trees.*
- Policy OB-2. *Preserve and rehabilitate continuous riparian corridors and adjacent habitat along the City's creeks and waterways.*
- Policy OB-3. *Require dedication of the 100-year flood plain to protect habitat and wildlife areas.*
- Policy OB-4. *Require preservation of more than the 100-year flood plain as merited by special resources or circumstances. Special circumstances may include, but are not limited to: sensitive wildlife or vegetation, wetland habitat, oak woodland areas, grassland connections in association with other habitat areas, slope or topographical considerations, recreation opportunities and maintenance access requirements.*
- Policy OB-5. *Limit recreation activities within the 100-year flood plain and require additional setback areas to trails and other public recreation uses so that natural resource areas are not adversely impacted.*
- Policy OB-7. *Require cumulative mitigation plans for wetlands, where feasible, in association with specific plans.*



- Policy OB-9. *Limit the access of pedestrians and cyclists to protect vernal pool and wetland areas.*
- Policy OB-10. *Manage public lands with special status species to encourage propagation of the species, and discourage nonindigenous, invasive species.*
- Policy OB-11. *Habitat preservation and mitigation for woodlands, creeks, riparian and seasonal wetland areas shall occur within the defined boundaries of the impacting projects, where long term resource viability is feasible and desirable.*
- Policy OB-12. *Consider the use of City property for habitat preservation and mitigation requirements resulting from development proposals, when such efforts do not conflict with existing resources, recreational opportunities or other City goals, policies or programs.*

Water Resources, Groundwater Recharge and Water Quality (OC)

- Policy OC-1. *Utilize cost-effective urban run-off controls, including Best Management Practices, to limit urban pollutants from entering the water courses.*
- Policy OC-2. *Implement erosion control and topsoil conservation measures to limit sediments within water courses.*
- Policy OC-3. *Ensure a buffer area between waterways and urban development to protect water quality and riparian areas.*
- Policy OC-4. *Continue to monitor and participate in, as appropriate, regional activities affecting water resources, groundwater and water quality.*
- Policy OC-5. *Continue to monitor groundwater resources. Areas where recharge potential is determined to be high shall be considered for designation as open space.*
- Policy OC-6. *Where feasible, locate stormwater retention ponds in areas where subsoil is suitable for groundwater recharge.*

Archaeological, Historic and Cultural Resources (OD)

- Policy OD-1. *When items of historical, cultural or archaeological significance are discovered within the City, a qualified archaeologist or historian shall be called to evaluate the find and to recommend a proper action.*
- Policy OD-2. *Significant archaeological sites shall, when feasible, be incorporated into open space areas.*



- Policy OD-3. *Subject to approval by the appropriate Federal, State and local agencies, artifacts which are discovered and subsequently determined to be "removable", shall be offered for dedication to the Maidu Park Native American Interpretive Center.*
- Policy OD-5. *Establish standards for the designation, improvement and protection of buildings, landmarks and sites of cultural and historic character.*
- Policy OD-7. *Encourage public activities, including the placement of monuments or plaques, that recognize and celebrate historic sites, structures and events.*
- Policy OD-9. *Provide opportunities for public awareness and education through coordination with the Historical Society and local schools.*

## **C.6 PARKS AND RECREATION POLICIES**

### **Parks and Recreation Policies (PA)**

- Policy PA-1. *The City shall ensure the provision of 9 acres of park land per 1,000 residents.*
- Policy PA-2. *The City shall retain flexibility in applying parks standards, in terms of size, facilities and service areas, so that existing and future needs can be met.*
- Policy PA-3. *The City may consider allocating park credits for lands that provide active and passive recreational value.*
- Policy PA-4. *The provision of parks and recreation facilities shall be based on the needs of Roseville residents and shall be assessed periodically.*
- Policy PA-6. *Park development and design shall take into consideration energy efficiency and water conservation, including the use of treated wastewater.*
- Policy PA-7. *Park development and design shall plan for safe and secure parks and recreation areas.*
- Policy PA-8. *The City shall require that parks and recreational facilities be phased or fully completed so as to be available as adjacent residential uses are developed.*
- Policy PA-9. *The Parks and Recreation Department shall continue to maintain City parks and open space areas, to assure safe, clean and orderly facilities.*

- Policy PA-10. *The City shall continue to provide a wide variety of programs, activities, and educational opportunities for the community.*
- Policy PA-11. *Parks and recreation facilities and programs shall accommodate those with special needs, including teenagers, seniors and the handicapped, and meet the requirements of the American Disabilities Act.*

## **C.7 PUBLIC FACILITIES POLICIES**

### **Civic Center, Community and Maintenance Facilities Policies (FA)**

- Policy FA-2. *Develop clustered community facilities, including libraries, parks, schools, senior centers and public meeting places, to maintain high quality services at the neighborhood level.*

### **Public Library System Policies (FB)**

- Policy FB-1. *Continue to provide a variety of library programs serving library users of all age groups.*
- Policy FB-3. *Provide branch libraries at the neighborhood level to service residents within a 5-mile radius of each facility.*
- Policy FB-4. *Provide branch libraries to service population increments of  $\pm 20,000$ .*
- Policy FB-5. *Plan for the clustering and connection of community facilities in neighborhood centers, including parks, libraries and community centers.*

### **Schools Policies (FC)**

- Policy FC-2. *Adequate facilities must be shown to be available in a timely manner before approval will be granted to new residential development.*
- Policy FC-3. *Financing for new school facilities will be identified and secured before new development is approved.*
- Policy FC-7. *Public/quasi-public land uses shall be designated in clusters so that the use of schools, parks, open space, libraries, child care and community activity and service centers create a community or activity focus.*
- Policy FC-8. *Schools, where feasible, shall be located away from hazards or sensitive resource conservation areas except where the proximity of resources may be of educational value and the protection of the resource is reasonably assured.*

Electric Utilities Policies (FD)

- Policy FD-1. *Secure new electric resources and transmission as necessary to meet projected demand levels.*
- Policy FD-2. *Provide improvements to the subtransmission and distribution system, consistent with facility planning studies, to ensure a reliable source of electricity is maintained.*
- Policy FD-3. *Develop siting and land use compatibility standards for energy facilities.*
- Policy FD-7. *Pursue reasonable and cost effective energy efficiency, conservation and load management programs pertinent to the electric utility system.*
- Policy FD-9. *Require new development to pay a fair share of the cost of new subtransmission and distribution needed to serve the development and to dedicate sites and easements needed for substations, transmission, subtransmission and distribution.*
- Policy FD-10. *Develop and implement public education programs designed to increase the public's awareness of energy issues, including conservation measures/practices.*

Electric and Private Utilities (FE)

- Policy FE-1. *Provide for the review and comment of development proposals by non City-owned utilities.*
- Policy FE-2. *Require the installation of communication and electric lines underground, except when infeasible.*
- Policy FE-3. *Require the provision of necessary utility easements in all new developments.*
- Policy FE-4. *The City shall work with non City-owned utility providers to insure that uses and equipment are planned and constructed in a manner consistent with adopted land use policies and design guidelines, to the extent feasible.*

Water System Policies (FF)

- Policy FF-1. *Secure sufficient sources of water to meet the needs of the existing community and planned growth.*
- Policy FF-2. *Provide sufficient water treatment capacity and infrastructure to meet projected water demand.*



- Policy FF-5. *Ensure all development provides for and pays a fair share of the cost for adequate water distribution, including line extensions, easements and plant expansions.*
- Policy FF-6. *Design the City's water system to maintain a minimum water pressure of 70 pounds per square inch (PSI) and a flow capacity of 500 gallons of water per minute for domestic and fire flow purposes. In no circumstances may the water pressure in any portion of the City be less than 50 PSI.*
- Policy FF-8. *Develop and pursue alternatives to permit delivery of PCWA water to Roseville.*
- Policy FF-9. *Monitor water quality regularly and take necessary measures to prevent contamination.*
- Policy FF-10. *Develop and implement water conservation standards and measures as necessary elements of the water system.*

Wastewater System Policies (FG)

- Policy FG-6. *Ensure that wastewater treatment capacity is available and that wastewater generation is minimized.*
- Policy FG-8. *Develop, plan and provide incentives for use of treated wastewater by the public and private sectors.*
- Policy FG-9. *Prevent hazardous materials from entering the wastewater system.*

Solid Waste, Source Reduction and Recycling Policies (FH)

- Policy FH-1. *Ensure existing and future recycling sites and operations remain viable through application of land use compatibility standards.*
- Policy FH-2. *Comply with the source reduction and recycling standards mandated by the State by reducing the projected quantity of solid waste disposed at the regional land fill by 25% in 1995 and 50% in 2000, as well as any mandated future reductions.*
- Policy FH-4. *Maintain a minimum 10-year reserve capacity at the landfill.*



Water and Energy Conservation Policies (FI)

- Policy FI-2. *Implement the Urban Water Management Plan developed by the Environmental Utilities Department.*
- Policy FI-3. *Explore potential uses of treated wastewater.*
- Policy FI-4. *Protect the quality and quantity of the City's groundwater and designate areas as open space where recharge potential is high.*
- Policy FI-6. *Develop and implement public education programs designed to increase public participation in energy and water conservation.*
- Policy FI-8. *Enforce energy requirements and encourage development and construction standards that promote energy conservation.*
- Policy FI-10. *Continue and expand energy conservation programs to serve all utility users.*

**C.8 SAFETY POLICIES**

Seismic and Geologic Hazards Policies (SA)

- Policy SA-2. *Continue to mitigate the potential impacts of geologic hazards through building plan review.*
- Policy SA-3. *Minimize soil erosion and sedimentation by maintaining compatible land uses, suitable building designs and appropriate construction techniques.*
- Policy SA-4. *Comply with state seismic and building standards in the design and siting of critical facilities, including police and fire stations, school facilities, hospitals, hazardous material manufacture and storage facilities, bridges and large public assembly halls.*
- Policy SA-6. *Require contour grading, where feasible, and revegetation to mitigate the appearance of engineered slopes, and to control erosion.*

Floodplain Designation Schematics Policies (SB)

- Policy SB-2. *Monitor and regularly update City flood studies, modeling and associated land use, zoning and other development regulations.*
- Policy SB-3. *Continue to pursue a regional approach to flood issues.*

- Policy SB-4. *Provide flood warning and forecasting information to community residents to reduce impacts to personal property.*
- Policy SB-5. *Minimize the placement of, and potential for flood damage to, public and emergency facilities, utilities, roadways and other infrastructure.*
- Policy SB-6. *Require new developments to detain on-site drainage such that the rate of runoff is maintained at pre-development levels.*
- Policy SB-7. *Continue to implement the Storm Maintenance Program to keep creeks and open storm water systems free of debris.*
- Policy SB-8. *Establish flood control assessment districts or consider other funding mechanisms to mitigate flooding impacts.*
- Policy SB-9. *Where feasible, maintain natural stream courses and adjacent habitat and combine flood control, recreation, water quality and open space functions.*

Police Services Policies (SC)

- Policy SC-1. *Provide a high level of visible patrol services within the City.*
- Policy SC-2. *Respond to both the emergency and routine calls for service in a timely manner consistent with Department policy.*
- Policy SC-4. *Establish programs which respond to community concerns of crime, gangs, drug abuse and traffic.*
- Policy SC-5. *Provide extensive community-based service and education programs designed to prevent crime and emphasizes citizen protection and involvement.*
- Policy SC-7. *Design parks to facilitate surveillance by adjoining residents, security services, and police.*
- Policy SC-8. *Work with other City Departments to review public and private development plans, ensuring that crime prevention is addressed.*
- Policy SC-9. *Coordinate with park rangers in patrolling parks and open space areas.*

### Fire Protection Policies (SD)

Policy SD-2. *Strive to achieve the following service levels:*

- *4 minute response time for all emergency calls;*
- *ISO rating of 3 or better; and*
- *500 gallons of water per minute within 10 minutes of an alarm.*

Policy SD-6. *Timing of the construction of fire stations shall be phased to be available to serve the surrounding service area.*

### Hazardous Materials Policies (SE)

Policy SE-2. *Work with Placer County and other public agencies to inform consumers about household use and disposal of hazardous materials.*

## **C.9 NOISE POLICIES**

### Transportation Noise Sources Policies (NA)

Policy NA-1. *The City shall allow the development of new noise-sensitive land uses (which include but are not limited to residential, schools and hospitals) only in areas exposed to existing or projected levels of noise from transportation noise sources which satisfy the levels specified in Table 1. Noise mitigation measures may be required to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 1.*

Policy NA-2. *The City shall require new roadway improvement projects to be mitigated so as not to exceed the noise levels specified in Table 1 at outdoor activity areas or interior spaces of existing noise-sensitive land uses.*

Policy NA-4. *The City shall require an acoustical analysis where:*

- a. *Noise sensitive land uses are proposed in areas exposed to existing or projected noise levels exceeding the levels specified in Table 1;*
- b. *Proposed transportation noise source projects are likely to produce noise levels exceeding the levels specified in Table 1 at existing or planned noise-sensitive uses.*

*An acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be considered in the project design.*



Fixed Noise Sources Policies (NA)

Policy NA-6. *The City shall allow the development of new noise-sensitive uses (which include, but are not limited to residential, schools and hospitals) only where the noise level due to fixed (non-transportation) noise sources satisfies the noise level standards of Table 3. Noise mitigation may be required to meet Table 3 performance standards.*

Policy NA-7. *The City shall require proposed fixed noise sources adjacent to noise-sensitive uses to be mitigated so as not to exceed the noise level performance standards of Table 3.*

Policy NA-8. *The City shall require an acoustical analysis where:*

- a. Noise-sensitive land uses are proposed in areas where existing or anticipated future fixed noise sources may result in noise levels exceeding the performance standards of Table 3.*
- b. Proposed non-residential or other fixed noise sources are likely to produce noise levels exceeding the performance standards of Table 3 at existing or planned noise-sensitive uses.*

*An acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be considered during project design.*

General Policies (NA)

Policy NA-9. *Where noise mitigation measures are required to achieve the standards of Tables 1 and 3, the emphasis of such measures shall be placed upon site planning and project design. These measures may include, but are not limited to building orientation, setbacks, landscaping and building construction practices. The use of noise barriers, such as soundwalls, shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.*

Policy NA-10. *The City shall regulate construction related noise to reduce impacts on adjacent uses consistent with the City's noise ordinance.*

**C.10 HOUSING POLICIES**

Affordable Housing Policies (HB)

Policy HB-1. *The City shall pursue programs which can provide a range of purchase and rental units affordable to all income groups.*



- Policy HB-2. *Emphasis of affordability efforts will be focused on rental units, since they offer the most cost effective way to provide affordable housing opportunities to very low- and low-income households.*
- Policy HB-3. *The 10% Affordable Housing Goal shall apply to all residential properties planned for 4+ units which are: a) amended to change residential density; b) amended to residential from another use; and c) amended to a non-residential use.*
- Policy HB-4. *The City shall strive to maintain an overall vacancy rate of 5 percent for both owner-occupied and rental units.*
- Policy HB-5. *Continue to pursue potential federal, state and local subsidies for construction of new affordable housing as well as the continued availability of existing units.*
- Policy HB-6. *The City shall provide direct financial assistance in support of local affordable housing activities.*
- Policy HB-8. *Encourage construction of units, which are targeted for low-, very low- and middle-income households, to be intermixed with market rate units to minimize identification of low-cost housing.*
- Policy HB-10. *Promote efficient and cost effective development types, such as mixed use projects and small lot subdivisions, as a means of achieving housing affordability and carrying out the provisions of the Land Use Element.*
- Policy HB-11. *The City shall work to maintain affordability of assisted units if an owner chooses to convert to market rate rentals upon expiration of the contract which restricts their rent level.*

#### Special Housing Needs Policies (HC)

- Policy HC-1. *Special housing needs shall be met through direct rental subsidies and below-market rate construction financing.*
- Policy HC-2. *Continue the City's housing rehabilitation loan and grant program to assist low-income elderly and handicapped households acquire rental and purchase housing.*

#### Residential Land Inventory Policies (HD)

- Policy HD-1. *Encourage development of mixed use projects in accordance with goals and policies contained in the Land Use Element.*

Residential Energy Conservation Policies (HF)

- Policy HF-1.     *The City shall continue operating its existing, cost-effective energy conservation programs.*
- Policy HF-2.     *Roseville shall continue to apply energy efficient requirements to all residential construction.*

---

---

***APPENDIX D***  
***ADDITIONAL EXISTING CONDITIONS ANALYSES***

---

---





---

---

## ***APPENDIX D***

### ***ADDITIONAL EXISTING CONDITIONS ANALYSES***

---

---

The impact analysis for traffic and circulation, air quality and noise contained in Chapter 4 of this DEIR uses 2010 market conditions as the baseline against which the Proposed Project is added. Water and wastewater are measured against buildout. This approach provides a more conservative (i.e., worst-case) impact analysis for these environmental topics compared to existing conditions. However, an analysis using existing conditions as the baseline scenario is presented in this appendix to provide decision makers with additional information concerning the environmental impacts of the Proposed Project.

Impact analyses for water, wastewater, traffic, air quality, and noise are provided below. In general, impacts described below are equal to or less than those identified in Chapter 4.

#### **Water/Wastewater**

Estimated water demands for overall water supply, storage, and transmission facility sizing for both Phase I and Full Project area calculated in Tables 4.12-10 and 4.12-19. The Phase I development scenario is projected to have an average daily demand of 1.85 million gallons per day (mgd) a maximum day demand of approximately 3.70 mgd. The Full Project development scenario is projected to have a an average daily demand of 3.59 mgd maximum day demand of approximately 7.18 mgd.

The City has existing contracted water entitlements and is capable of providing an adequate supply of water for both the Phase I and Full Project development scenarios without affecting existing water users. The City's current peak (maximum day) use is approximately 33 mgd during the summer. With Phase I, the City's peak use would be about 37.0 mgd. With Full Project, the City's peak use would be about 40.18 mgd. With entitlements of 55.3 mgd, the City has adequate water supply to serve existing users and the Proposed Project.

The City can receive a maximum of 42 mgd from its contracted water entitlement, which would be adequate to meet the peak use rate of the Proposed Project. In addition, measures are being implemented to increase the City's water supply infrastructure and existing General Plan policies related to providing an adequate water supply are in place. For these reasons, and because the City can meet the Proposed Project's water demand and is implementing water distribution infrastructure improvements, impacts on the City's existing water supply are less than significant.

The City's water treatment plant has recently been expanded to 48 mgd. Based on the projected water demands of the Proposed Project as described above, the City's water treatment plant has adequate capacity to provide treated water for Proposed Project.

Estimated average dry weather wastewater generation for both Phase I and Full Project are calculated in Tables 4.12-12 and 4.12-21 of the DEIR, respectively. Phase I development is projected to have a wastewater generation rate of 1.26 million gallons per day (mgd). The Full Project development scenarios projected to have a wastewater generation rate of approximately 2.36 mgd. With project improvements to extend infrastructure to the Plan Area, the impact on the existing conveyance system would be less than significant.

## **Transportation**

For the analysis of existing conditions, including the Proposed Project, pending roadway improvements were incorporated into the current transportation system. The intersection of Foothills Boulevard at Blue Oaks Boulevard was assumed to be signalized. The geometry for the intersection of Foothills Boulevard at Pleasant Grove Boulevard was provided by the City's Public Works Department. The extension of Blue Oaks Boulevard from Foothills Boulevard to Fiddymont Road was not included in the Existing/No Project scenario but was assumed under existing conditions that include the project.

The proposed Pleasant Grove Boulevard/SR65 interchange was not included as part of the existing conditions analysis, with or without the Proposed Project. Also excluded were any modification to the existing Blue Oaks Boulevard/SR-65 interchange.

On the Proposed Project site, the roadways shown on the Circulation Master Plan of the Project Description (Figure 3-6) were assumed to be constructed consistent with the project phasing. Under Phase I of the Proposed Project, Blue Oaks Boulevard was assumed to be extended to Fiddymont Road and Woodcreek Oaks was assumed to be extended from north of Pleasant Grove Boulevard to north of Blue Oaks Boulevard. It was assumed that the intersection of Blue Oaks Boulevard and Woodcreek Oaks Boulevard would be signalized.

Under Phase II, Junction Boulevard would be extended to intersect with a realigned Baseline Road, just east of Fiddymont Road. The intersection was assumed to be signalized. All other collector roadways included in the plans for Phases I and II were assumed to be constructed.

The existing plus project traffic analysis was based on an early version of the Proposed Project, essentially the same as Alternative 4, the Lower Density Alternative. The difference in trip generation between the earlier version and the project described in Chapter 3 is relatively small. The number of trips generated would be approximately 17.5 percent lower than the Proposed Project in Phase I and seven percent lower for the Full Project. This difference is not great enough to substantially alter the conclusions of the existing plus project analysis.

Development of Phase I of the Proposed Project would not create any level of service impacts on intersections in the City of Roseville or the surrounding area. There would be increased demand for transit service to the Plan Area, which could be mitigated by the establishment of



both fixed-route and on-call service. There would also be a less-than-significant increased demand for bicycle facilities that would link the bikeways of the Proposed Project to the City's existing bikeway system.

Development of Phase II of the Proposed Project under existing conditions would result in two level of service impacts in vicinity of the Plan Area. The intersection of Foothills Boulevard and Baseline Road/Main Street, which operates at LOS "C" during the p.m. peak hour under existing conditions, would operate at LOS "D" with the addition of the Full Project. The addition of a second northbound left turn lane would provide LOS "C" or better operating conditions. The intersection of Fiddymment Road and Baseline Road, which currently operates at LOS "A" during the p.m. peak hour as a stop-controlled intersection, would operate at LOS "E" with the additional traffic generated by the Full Project. The installation of a traffic signal at this intersection would provide an acceptable level of service. Development of Phase II would result in additional demand for transit service to the project site, which could be mitigated by the establishment of both fixed-route and on-call service. There would also be an increased demand for bicycle facilities that would link the bikeways of the Proposed Project to the City's existing bikeway system.

Daily traffic volumes associated with existing conditions with and without the project are shown in Figure D-1.

## **Air**

The only air quality impact that requires a distinction between Existing and Future (Year 2010) conditions is local carbon monoxide (CO) concentration. The estimate of carbon monoxide levels is based on the traffic analysis, which, as explained above, used an early version of the Proposed Project for the existing plus project analysis. The difference between the two versions is relatively small, and is not expected to affect the outcome of the CO analysis.

Using an Existing baseline results in lower traffic volumes. However, average motor vehicle emission factors are estimated to be much higher for the 1996 vehicle fleet than they would be for the future vehicle fleet. Therefore, CO results are higher at each of the intersections in Table D-1 than they are for results at corresponding intersections shown in Table 4.10-6. However, all of the estimated CO levels remain below applicable State standards. Therefore, project CO impacts on existing conditions would be less than significant.

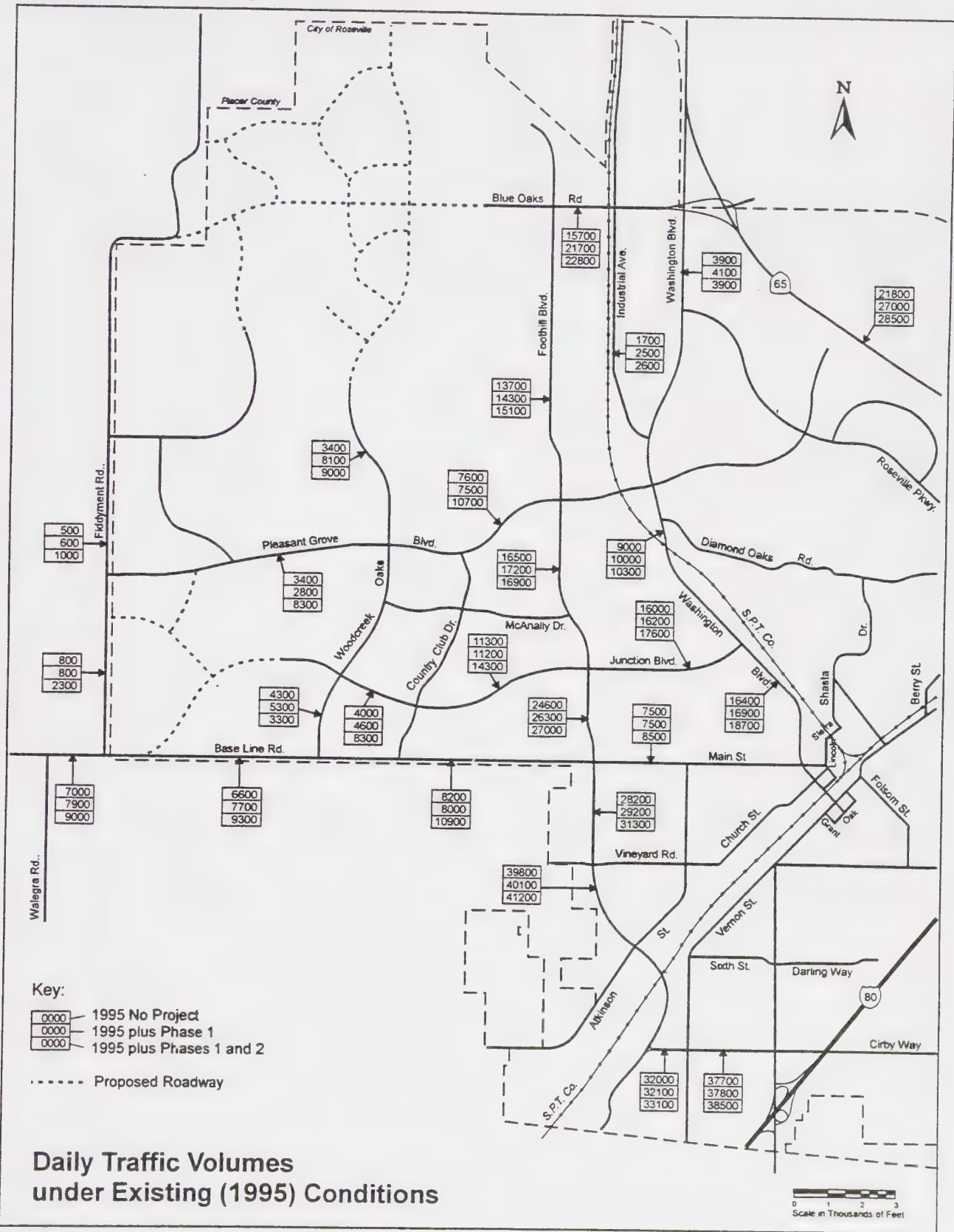
## **Noise**

The only noise impact that requires distinction between Existing and Future conditions is traffic noise. As discussed above, the existing plus traffic analysis used an early version of the Proposed Project. The difference between the two versions is relatively small, and is not expected to affect the outcome of the noise analysis.

Table D-2 shows projected noise levels at reference receptor distances of 50 and 100 feet from roadway centerlines under Existing Baseline conditions. Three scenarios are considered: No Project, Existing Plus Phase I and Existing Plus Full Project (Phases I+II). The Existing baseline









**TABLE D-1**

**PREDICTED MAXIMUM 1-HOUR AND 8-HOUR  
CARBON MONOXIDE CONCENTRATIONS (IN PPM): EXISTING BASE  
CONDITIONS**

| <b>Location</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Averaging Time</b> | <b>No Project (+HRN Phases I&amp;II)</b> | <b>Project Phase I (+HRN Phase I)</b> | <b>Project Phases I&amp;II (+HRN Phases I&amp;II)</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------|---------------------------------------|-------------------------------------------------------|
| 1. Foothill & Blue Oaks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1-hr.                 | 16.1                                     | 12.3                                  | 13.6                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | 6.6                                      | 6.8                                   | 7.4                                                   |
| 2. Foothill & Junction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1-hr.                 | 12.4                                     | 12.7                                  | 12.8                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | 7.1                                      | 7.3                                   | 7.4                                                   |
| 3. Foothill & Baseline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1-hr.                 | 13.9                                     | 13.8                                  | 13.4                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | 7.2                                      | 7.2                                   | 7.2                                                   |
| 4. Washington & Main                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1-hr.                 | 10.4                                     | 10.9                                  | 10.7                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | 4.8                                      | 5.0                                   | 5.6                                                   |
| 5. Woodcreek & Baseline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1-hr.                 | 11.1                                     | 11.2                                  | 8.6                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | 5.5                                      | 5.5                                   | 4.6                                                   |
| 7. Woodcreek & Blue Oaks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1-hr.                 | *                                        | 11.7                                  | 13.5                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | *                                        | 5.9                                   | 6.7                                                   |
| Background Concentrations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1-hr.                 | 4.5                                      | 4.5                                   | 4.5                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | 2.4                                      | 2.4                                   | 2.4                                                   |
| California Standards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1-hr.                 | 20                                       | 20                                    | 20                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8-hr.                 | 9.0                                      | 9.0                                   | 9.0                                                   |
| <p>Note: The tabulated concentrations are the sums of a background component, which includes the cumulative effects of all CO sources in the project vicinity, and a local component, which reflects the effects of vehicular traffic on roadways. Local CO components were derived from the CALINE4 computer program, assuming worst-case conditions at the intersections. The location of the 1-hour receptor is at the curbside and the 8-hour receptor is 10 meters from the curb. Traffic data was provided by DKS Associates.</p> <p>* = Traffic data not available at this intersection under this scenario.</p> <p>SOURCE: EIP Associates, 1996.</p> |                       |                                          |                                       |                                                       |

| TABLE D-2                                                                                       |                              |                                         |                                                        |         |             |            |        |             |                  |             |
|-------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------------|--------------------------------------------------------|---------|-------------|------------|--------|-------------|------------------|-------------|
| L <sub>dn</sub> 'S AT RECEPTORS 50 AND 100 FEET FROM ROADWAY CENTERLINES<br>(dBA)               |                              |                                         |                                                        |         |             |            |        |             |                  |             |
| Locations                                                                                       |                              |                                         | L <sub>dn</sub> at Reference Distances (Existing Base) |         |             |            |        |             | Δ re: No Project |             |
| #                                                                                               | Roadway                      | Segment                                 | 50'                                                    |         |             | 100'       |        |             |                  |             |
|                                                                                                 |                              |                                         | No Project                                             | Project |             | No Project | Phases |             |                  |             |
|                                                                                                 |                              |                                         |                                                        | I       | Full (I+II) |            | I      | Full (I+II) | I                | Full (I+II) |
| 1                                                                                               | Baseline                     | Fiddymment/Junction                     | 67                                                     | 68      | 68          | 63         | 64     | 64          | 1                | 1           |
| 2                                                                                               |                              | Junction/Oaks                           | *                                                      | *       | 67          | *          | *      | 63          | *                | *           |
| 3                                                                                               |                              | Woodcreek Oaks/Country Club             | 70                                                     | 70      | 72          | 65         | 65     | 67          | 0                | 2           |
| 4                                                                                               | Junction                     | Baseline/Woodcreek Oaks                 | *                                                      | *       | 65          | *          | *      | 61          | *                | *           |
| 5                                                                                               |                              | Woodcreek Oaks/Country Club             | 59                                                     | 61      | 65          | 55         | 57     | 61          | 2                | 6           |
| 6                                                                                               |                              | Country Club/Foothills                  | 65                                                     | 65      | 67          | 61         | 61     | 63          | 0                | 2           |
| 7                                                                                               | Pleasant Grove               | Fiddymment/Woodcreek Oaks               | 65                                                     | 64      | 68          | 60         | 59     | 63          | -1               | 3           |
| 8                                                                                               |                              | Woodcreek Oaks/Country Club             | 67                                                     | 67      | 69          | 62         | 62     | 64          | 0                | 2           |
| 9                                                                                               |                              | Country Club/Foothills                  | 67                                                     | 67      | 68          | 63         | 63     | 64          | 0                | 1           |
| 10                                                                                              | Blue Oaks                    | Fiddymment S/Fiddymment N               | *                                                      | 56      | 57          | *          | 52     | 53          | *                | *           |
| 11                                                                                              |                              | Fiddymment N/S Entrance Diamond Creek   | *                                                      | 59      | 64          | *          | 55     | 60          | *                | *           |
| 12                                                                                              |                              | S Entrance Diamond Creek/Woodcreek Oaks | *                                                      | 66      | 68          | *          | 62     | 64          | *                | *           |
| 13                                                                                              |                              | Woodcreek Oaks/Foothills                | 60                                                     | 70      | 71          | 55         | 65     | 66          | 10               | 11          |
| 14                                                                                              |                              | Foothills/Industrial                    | 71                                                     | 72      | 72          | 67         | 68     | 68          | 1                | 1           |
| 15                                                                                              | Foothills                    | S:Blue Oaks                             | 69                                                     | 70      | 70          | 65         | 66     | 66          | 1                | 1           |
| 16                                                                                              | Woodcreek Oaks               | N:Blue Oaks                             | *                                                      | 66      | 68          | *          | 62     | 64          | *                | *           |
| 17                                                                                              |                              | S:Blue Oaks                             | *                                                      | 67      | 67          | *          | 62     | 62          | *                | *           |
| 18                                                                                              |                              | Blue Oaks/Pleasant Grove                | *                                                      | 66      | 67          | *          | 61     | 62          | *                | *           |
| 19                                                                                              |                              | N:Pleasant Grove                        | 64                                                     | 67      | 68          | 59         | 62     | 63          | 3                | 4           |
| 20                                                                                              |                              | Pleasant Grove/Junction                 | 64                                                     | 66      | 65          | 60         | 62     | 61          | 2                | 1           |
| 21                                                                                              | Fiddymment                   | N:Blue Oaks                             | 58                                                     | 62      | 59          | 53         | 57     | 54          | 4                | 1           |
| 21                                                                                              |                              | Pleasant Grove/Baseline                 | 55                                                     | 56      | 60          | 50         | 51     | 55          | 1                | 5           |
| 23                                                                                              |                              | Baseline/PFE                            | 59                                                     | 60      | 62          | 54         | 55     | 57          | 1                | 3           |
| 23                                                                                              | S Entrance Diamond Creek     | N:Blue Oaks                             | *                                                      | 63      | 64          | *          | 58     | 59          | *                | *           |
| 24                                                                                              | SW Entrance Woodcreek Oaks W | N:Junction                              | *                                                      | *       | 63          | *          | *      | 58          | *                | *           |
| # Projected noise level increases that exceed the significance criteria are shown in bold face. |                              |                                         |                                                        |         |             |            |        |             |                  |             |
| * Roadway segment does not exist under this scenario.                                           |                              |                                         |                                                        |         |             |            |        |             |                  |             |
| SOURCE: EIP Associates, 1996.                                                                   |                              |                                         |                                                        |         |             |            |        |             |                  |             |



tends to exaggerate relative project impacts, because they represent the minimum baseline traffic levels to which project-generated traffic would be added. Therefore, while *total* noise levels are lower than those shown in Table 4.11-8, modeled project-related noise level *increases* are higher for most comparable roadway segments. Since development of the Plan Area would occur gradually over time, project-generated traffic noise level increases would not actually be as dramatic as those shown here.

Substantial noise level increases are shown for the following links: Junction between Woodcreek Oaks and Country Club (Full Project only), Blue Oaks between Woodcreek Oaks and Foothills (Phase I and Full Project), Fiddymont north of Blue Oaks (Phase I only) and Fiddymont between Pleasant Grove and Baseline. Noise exposure along the latter two segments is of concern primarily because of potential future *project* development that would occur alongside them; currently, the land on either side of these segments is mostly undeveloped. Therefore, projected noise level increases would not translate to substantial impacts at existing receptors. Projected land uses on either side of Blue Oaks between Woodcreek Oaks and Foothills Boulevard are primarily light industrial, with substantial building setbacks anticipated. Even if impacts at these potential future land uses were subjected to evaluation relative to Existing conditions, substantial impacts would not be found. Existing residential development exists along Junction between Woodcreek Oaks and Country Club. However, even at a distance of 50 feet from the centerline of this roadway, the projected worst-case noise level under the Full Project scenario is 65 dBA  $L_{dn}$ . Most if not all of these homes are set back farther than 50 feet. In addition, it is reasonable to expect that the existing insulation of these structures is sufficient to assure that interior noise levels would not exceed the 45 dBA  $L_{dn}$  interior standard even at this level of exterior noise exposure.

Table D-3 shows projected distances to selected  $L_{dn}$  contours relative to Existing conditions. These contour distances are useful for comparison to those shown in Table 4.11-8. However, it would be inappropriate to base project noise mitigation requirements on these Existing contours; such mitigation must anticipate future cumulative traffic growth.

**TABLE D-3**  
**DISTANCES TO SELECTED  $L_{dn}$  CONTOURS**

| Locations |                              |                                         | Distance to Contours (Existing Base) |      |         |      |         |      |
|-----------|------------------------------|-----------------------------------------|--------------------------------------|------|---------|------|---------|------|
|           |                              |                                         | 70 dBA                               |      | 65 dBA  |      | 60 dBA  |      |
| #         | Roadway                      | Segment                                 | Phase I                              | Full | Phase I | Full | Phase I | Full |
| 1         | Baseline                     | Fiddymment/Junction                     | 35'                                  | 40'  | 80'     | 90'  | 170'    | 190' |
| 2         |                              | Junction/Oaks                           | *                                    | 25'  | *       | 70'  | *       | 155' |
| 3         |                              | Woodcreek Oaks/Country Club             | 50'                                  | 65'  | 105'    | 140' | 230'    | 300' |
| 4         | Junction                     | Baseline/Woodcreek Oaks                 | *                                    | *    | *       | 55'  | *       | 110' |
| 5         |                              | Woodcreek Oaks/Country Club             | *                                    | *    | *       | 55'  | 55'     | 115' |
| 6         |                              | Country Club/Foothills                  | *                                    | *    | 55'     | 75'  | 115'    | 155' |
| 7         | Pleasant Grove               | Fiddymment/Woodcreek Oaks               | *                                    | *    | 40'     | 75'  | 90'     | 160' |
| 8         |                              | Woodcreek Oaks/Country Club             | *                                    | *    | 85'     | 85'  | 140'    | 180' |
| 9         |                              | Country Club/Foothills                  | *                                    | *    | 70'     | 90'  | 150'    | 190' |
| 10        | Blue Oaks                    | Fiddymment S/Fiddymment N               | *                                    | *    | *       | *    | 25'     | 25'  |
| 11        |                              | Fiddymment N/S Entrance Diamond Creek   | *                                    | *    | *       | 45'  | 45'     | 95'  |
| 12        |                              | S Entrance Diamond Creek/Woodcreek Oaks | *                                    | 35'  | 65'     | 85'  | 135'    | 180' |
| 13        |                              | Woodcreek Oaks/Foothills                | 50'                                  | 55'  | 105'    | 115' | 220'    | 250' |
| 14        |                              | Foothills/Industrial                    | 70'                                  | 75'  | 155'    | 160' | 330'    | 350' |
| 15        | Foothills                    | S:Blue Oaks                             | 50'                                  | 50'  | 105'    | 110' | 220'    | 230' |
| 16        | Woodcreek Oaks               | N:Blue Oaks                             | *                                    | *    | 60'     | 60'  | 125'    | 130' |
| 17        |                              | S:Blue Oaks                             | 25'                                  | 25'  | 65'     | 70'  | 140'    | 145' |
| 18        |                              | Blue Oaks/Pleasant Grove                | *                                    | *    | 60'     | 65'  | 130'    | 140' |
| 19        |                              | N:Pleasant Grove                        | *                                    | *    | 60'     | 75'  | 130'    | 160' |
| 20        |                              | Pleasant Grove/Junction                 | *                                    | *    | 60'     | 55'  | 125'    | 115' |
| 21        | Fiddymment                   | N:Blue Oaks                             | *                                    | *    | 25'     | *    | 65'     | 40'  |
| 22        |                              | Pleasant Grove/Baseline                 | *                                    | *    | 15'     | 25'  | 50'     | 65'  |
| 23        |                              | Baseline/PFE                            | *                                    | *    | 15'     | 25'  | 50'     | 65'  |
| 24        | S Entrance Diamond Creek     | N:Blue Oaks                             | *                                    | *    | 30'     | 35'  | 75'     | 85'  |
| 25        | SW Entrance Woodcreek Oaks W | N:Junction                              | *                                    | *    | *       | 30'  | 45'     | 75'  |

\* = Either roadway segment does not exist or contour is within the roadway right-of-way.  
SOURCE: EIP Associates, 1996.

---

---

***APPENDIX E***  
***BIOLOGICAL INFORMATION***

---

---





TABLE E-1

## SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE NORTH ROSEVILLE AREA

| Common Name                | Scientific Name <sup>1</sup>                             | Status <sup>2</sup><br>(Fed/CA/CNPS) | Season <sup>3</sup> | Primary Habitat <sup>4</sup>                            | Present<br>on Site <sup>5</sup> | Comments                |
|----------------------------|----------------------------------------------------------|--------------------------------------|---------------------|---------------------------------------------------------|---------------------------------|-------------------------|
| PLANTS                     |                                                          |                                      |                     |                                                         |                                 |                         |
| Big-scale balsamroot       | <i>Balsamorhiza macrolepis</i><br>var. <i>macrolepis</i> | --/--/1B                             | Mar-Jun             | Grassland                                               | S                               | Not observed in surveys |
| Hispid bird's beak         | <i>Cordylanthus mollis</i> var.<br><i>hispidus</i>       | --/--/1B                             | Jun-Sept            | Grassland/vernal pool                                   | S                               | Not observed in surveys |
| Dwarf downingia            | <i>Downingia pusilla</i>                                 | --/--/2                              | Mar-May             | Vernal pool                                             | S                               | Not observed in surveys |
| Boggs Lake<br>hedge-hyssop | <i>Gratiola heterosepala</i>                             | --/E/1B                              | Apr-Jun             | Vernal pool                                             | S                               | Not observed in surveys |
| Ahart's dwarf rush         | <i>Juncus leiospermus</i> var.<br><i>ahartii</i>         | --/--/1B                             | Mar-May             | Vernal pool                                             | S                               | Not observed in surveys |
| Legenere                   | <i>Legenere limosa</i>                                   | --/--/1B                             | May-Jun             | Vernal pool                                             | S                               | Not observed in surveys |
| Pincushion<br>navarretia   | <i>Navarretia myserii</i>                                | --/--/1B                             | May                 | Vernal pool                                             | S                               | Not observed in surveys |
| Slender orcutt grass       | <i>Orcuttia tenuis</i>                                   | T/E/1B                               | May-July            | Vernal pool                                             | S                               | Not observed in surveys |
| Sacramento orcutt<br>grass | <i>Orcuttia viscida</i>                                  | E/E/1B                               | May-Jun             | Vernal pool                                             | S                               | Not observed in surveys |
| Sanford's arrowhead        | <i>Sagittaria sanfordii</i>                              | --/--/1B                             | May - August        | Marshes and swamps<br>(assorted shallow fresh<br>water) | S                               | May occur in creek      |

TABLE E-1

## SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE NORTH ROSEVILLE AREA

| Common Name                       | Scientific Name <sup>1</sup>             | Status <sup>2</sup><br>(Fed/CA/CNPS) | Season <sup>3</sup> | Primary Habitat <sup>4</sup>     | Present on Site <sup>5</sup> | Comments                          |
|-----------------------------------|------------------------------------------|--------------------------------------|---------------------|----------------------------------|------------------------------|-----------------------------------|
| INVERTEBRATES                     |                                          |                                      |                     |                                  |                              |                                   |
| Vernal pool fairy shrimp          | <i>Branchinecta lynchi</i>               | T/--                                 | Resident            | Vernal pool                      | O                            | Occurs in vernal pools and swales |
| Conservancy fairy shrimp          | <i>Branchinecta conservatio</i>          | E/--                                 | Resident            | Vernal pool                      | U                            | Outside known range               |
| Vernal pool tadpole shrimp        | <i>Lepidurus packardii</i>               | E/--                                 | Resident            | Vernal pool                      | U                            | Outside known range               |
| Valley elderberry longhorn beetle | <i>Desmocerus californicus dimorphus</i> | T/--                                 | Resident            | Elderberry plants                | S                            | None observed in field surveys    |
| AMPHIBIANS                        |                                          |                                      |                     |                                  |                              |                                   |
| California tiger salamander       | <i>Ambystoma californiense</i>           | C/CSC                                | Resident            | Wetlands/grasslands/vernal pools | S                            | Outside known range               |
| Western spadefoot toad            | <i>Scaphiopus hammondi</i>               | --/CSC                               | Resident            | Wetlands/grasslands/vernal pools | S                            | Known from general vicinity       |
| California red-legged frog        | <i>Rana aurora draytoni</i>              | T/CSC                                | Resident            | Pools/ponds/slow streams/marshes | S                            | None observed or reported surveys |
| REPTILES                          |                                          |                                      |                     |                                  |                              |                                   |
| Northwestern pond turtle          | <i>Clemmys marmorata marmorata</i>       | --/CSC                               | Resident            | Ponds/slow moving waters         | S                            | None reported, unlikely to occur  |
| BIRDS                             |                                          |                                      |                     |                                  |                              |                                   |
| Double-crested cormorant          | <i>Phalacrocorax auritus</i>             | CSC (Rookery)                        | Resident            | Aquatic/wetlands                 | U                            | No suitable foraging area         |
| Great blue heron                  | <i>Ardea herodias</i>                    | (Rookery)                            | Resident            | Wetlands                         | U                            | No suitable foraging area         |

TABLE E-1

## SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE NORTH ROSEVILLE AREA

| Common Name <sup>1</sup>  | Scientific Name <sup>1</sup>    | Status <sup>2</sup><br>(Fed/CA/CNPS) | Season <sup>3</sup> | Primary Habitat <sup>4</sup>                           | Present on Site <sup>5</sup> | Comments                     |
|---------------------------|---------------------------------|--------------------------------------|---------------------|--------------------------------------------------------|------------------------------|------------------------------|
| Great egret               | <i>Casmerodius albus</i>        | (Rookery)                            | Resident            | Wetlands                                               | U                            | No suitable foraging area    |
| White-tailed kite         | <i>Elanus leucurus</i>          | (Nesting)                            | Resident            | Woodland/grassland/marshes                             | O                            | Forages in grasslands        |
| Bald eagle                | <i>Haliaeetus leucocephalus</i> | T/E                                  | Winter              | Nests in large trees; forages in large bodies of water | U                            | Not detected in project area |
| Northern harrier          | <i>Circus cyaneus</i>           | --/CSC                               | Resident            | Nests in freshwater marsh; forages in grasslands       | O                            | Forages in grasslands        |
| Sharp-shinned hawk        | <i>Accipiter striatus</i>       | --/CSC (Nesting)                     | Winter              | Nests in forests; forages in wooded habitats           | S                            | Outside nesting area         |
| Cooper's hawk             | <i>Accipiter cooperi</i>        | --/CSC (Nesting)                     | Resident            | Woodland habitats                                      | O                            | Seen in area, no nests found |
| Swainson's hawk           | <i>Buteo swainsoni</i>          | --/T                                 | Summer              | Nests in riparian trees; forages in open fields        | O                            | Seen in area, no nests found |
| Ferruginous hawk          | <i>Buteo regalis</i>            | C2/CSC                               | Winter              | Various upland habitats                                | S                            | Present during migration     |
| Golden eagle              | <i>Aquila chrysaetos</i>        | FP/CSC                               | Winter              | Various upland habitats                                | S                            | Present during migration     |
| Merlin                    | <i>Falco columbarius</i>        | --/CSC                               | Winter              | Grasslands to woodlands                                | S                            | Present during migration     |
| American peregrine falcon | <i>Falco peregrinus anatum</i>  | E/E                                  | Winter              | Nests on cliffs; forages in various habitats           | U                            | No suitable nest sites       |
| Prairie falcon            | <i>Falco mexicanus</i>          | --/CSC                               | Winter              | Grasslands                                             | S                            | Present during migration     |
| Mountain plover           | <i>Charadrius montanus</i>      | C/CSC                                | Winter              | Grasslands                                             | S                            | Present during migration     |
| Long-billed curlew        | <i>Numenius americanus</i>      | --/CSC                               | Winter              | Wetlands, meadows, coastal areas                       | S                            | Present during migration     |
| Burrowing owl             | <i>Speotyto cunicularia</i>     | --/CSC (Nesting)                     | Summer              | Grassland                                              | S                            | None observed in surveys     |
| Long-eared owl            | <i>Asio otus</i>                | --/CSC (Nesting)                     | Winter              | Woodlands                                              | S                            | None observed in surveys     |



TABLE E-1

## SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE NORTH ROSEVILLE AREA

| Common Name              | Scientific Name <sup>1</sup>          | Status <sup>2</sup><br>(Fed/CA/CNPS) | Season <sup>3</sup> | Primary Habitat <sup>4</sup>                      | Present on Site <sup>5</sup> | Comments                                        |
|--------------------------|---------------------------------------|--------------------------------------|---------------------|---------------------------------------------------|------------------------------|-------------------------------------------------|
| Short-eared owl          | <i>Asio flammeus</i>                  | --/CSC (Nesting)                     | Winter              | Woodlands                                         | U                            | Outside nesting area                            |
| Bank swallow             | <i>Riparia riparia</i>                | T/-- (Nesting)                       | Resident            | Nests in river banks; forages in various habitats | U                            | None observed in surveys                        |
| Loggerhead shrike        | <i>Lanius ludovicianus</i>            | --/CSC                               | Resident            | Various open habitats                             | O                            | Present in area                                 |
| Tricolored blackbird     | <i>Agelaius tricolor</i>              | --/CSC                               | Resident            | Marshes/grasslands/fields                         | U                            | No suitable nest sites                          |
| MAMMALS                  |                                       |                                      |                     |                                                   |                              |                                                 |
| Townsend's big-eared bat | <i>Plecotus townsendii townsendii</i> | --/CSC                               | Resident            | Roosts in structures and caves                    | S                            | May use oak woodland                            |
| Pallid bat               | <i>Antrozous pallida</i>              | --/CSC                               | Resident            | Roosts in structures and caves                    | S                            | May use oak woodland                            |
| American badger          | <i>Taxidea taxus</i>                  | --/CSC                               | Resident            | Various upland habitats                           | S                            | May be locally extirpated.<br>May use oak trees |

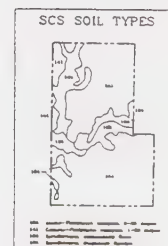
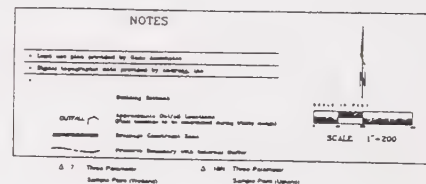


TABLE E-1

## SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE NORTH ROSEVILLE AREA

| Common Name                                                                                                                                                                                                                                                                                                                                                                                              | Scientific Name <sup>1</sup> | Status <sup>2</sup><br>(Fed/CA/CNPS) | Season <sup>3</sup> | Primary Habitat <sup>4</sup> | Present on Site <sup>5</sup> | Comments |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------|---------------------|------------------------------|------------------------------|----------|
| NOTES:                                                                                                                                                                                                                                                                                                                                                                                                   |                              |                                      |                     |                              |                              |          |
| <sup>1</sup> Scientific names are based on the following sources: ABA 1995, Jennings 1983, Hickman 1993, Zeiner <i>et al.</i> 1990.                                                                                                                                                                                                                                                                      |                              |                                      |                     |                              |                              |          |
| <sup>2</sup> Status = Status of species relative to the Federal and California State Endangered Species Acts and Fish and Game Code of California.                                                                                                                                                                                                                                                       |                              |                                      |                     |                              |                              |          |
| Fed = Federal status.                                                                                                                                                                                                                                                                                                                                                                                    |                              |                                      |                     |                              |                              |          |
| E = Federally listed as endangered.                                                                                                                                                                                                                                                                                                                                                                      |                              |                                      |                     |                              |                              |          |
| T = Federally listed as threatened.                                                                                                                                                                                                                                                                                                                                                                      |                              |                                      |                     |                              |                              |          |
| PE = Proposed endangered.                                                                                                                                                                                                                                                                                                                                                                                |                              |                                      |                     |                              |                              |          |
| PT = Proposed threatened.                                                                                                                                                                                                                                                                                                                                                                                |                              |                                      |                     |                              |                              |          |
| C = As of February 28, 1996 (Federal Register Vol 61, No. 40), the USFWS has reclassified former Candidate Category 1, 2, and 3 species as "Candidates." Species formerly considered Category 1 are generally now considered Candidate species. Species formerly considered Category 2 and 3 are of concern to the agency but have no specific status with regard to the Federal Endangered Species Act. |                              |                                      |                     |                              |                              |          |
| CA = California status.                                                                                                                                                                                                                                                                                                                                                                                  |                              |                                      |                     |                              |                              |          |
| E = Endangered; Species whose continued existence in California is jeopardized.                                                                                                                                                                                                                                                                                                                          |                              |                                      |                     |                              |                              |          |
| T = Threatened; Species that although not presently threatened in California with extinction, is likely to become endangered in the foreseeable future.                                                                                                                                                                                                                                                  |                              |                                      |                     |                              |                              |          |
| CSC = California Department of Fish and Game "Species of Special Concern". Species with declining populations in California.                                                                                                                                                                                                                                                                             |                              |                                      |                     |                              |                              |          |
| FP = Fully protected against take pursuant to the Fish and Game Code Section 3503.5.                                                                                                                                                                                                                                                                                                                     |                              |                                      |                     |                              |                              |          |
| -- = No California or federal status.                                                                                                                                                                                                                                                                                                                                                                    |                              |                                      |                     |                              |                              |          |
| CNPS = California Native Plant Society Listing (does not apply to wildlife species).                                                                                                                                                                                                                                                                                                                     |                              |                                      |                     |                              |                              |          |
| 1B = Plants, rare, threatened or endangered in California and elsewhere and are rare throughout their range. Plants constituting List 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection) of the California Department of Fish and Game Code and are eligible for state listing.                                                                                               |                              |                                      |                     |                              |                              |          |
| 2 = Plants rare, threatened or endangered in California but more common elsewhere.                                                                                                                                                                                                                                                                                                                       |                              |                                      |                     |                              |                              |          |
| 3 = Plants about which we need more information-a review list. List 3 is an assemblage of taxa that have been transferred from other lists or that have been suggested for consideration. Information that would allow an assignment to one of the other lists or to reject them is lacking.                                                                                                             |                              |                                      |                     |                              |                              |          |
| 4 = Plants of limited distribution-a watch list. Plants in this category are of limited distribution in California and their vulnerability or susceptibility to threat appears low at this time. However, they are uncommon enough that their status should be monitored regularly.                                                                                                                      |                              |                                      |                     |                              |                              |          |
| <sup>3</sup> Season = Blooming period for plants. Season of use for animals. RES=Resident; SUMR=Summer; WNTR=Winter.                                                                                                                                                                                                                                                                                     |                              |                                      |                     |                              |                              |          |
| <sup>4</sup> Primary habitat = Most likely habitat association.                                                                                                                                                                                                                                                                                                                                          |                              |                                      |                     |                              |                              |          |
| <sup>5</sup> Present on-site:                                                                                                                                                                                                                                                                                                                                                                            |                              |                                      |                     |                              |                              |          |
| O = Observed on-site.                                                                                                                                                                                                                                                                                                                                                                                    |                              |                                      |                     |                              |                              |          |
| R = Recorded on-site.                                                                                                                                                                                                                                                                                                                                                                                    |                              |                                      |                     |                              |                              |          |
| S = Suitable habitat on-site.                                                                                                                                                                                                                                                                                                                                                                            |                              |                                      |                     |                              |                              |          |
| U = Unsuitable habitat on-site.                                                                                                                                                                                                                                                                                                                                                                          |                              |                                      |                     |                              |                              |          |
| SOURCE: California Department of Fish and Game, <i>California Natural Diversity Database</i> , 1995; California Native Plant Society, <i>Electronic Inventory of Rare and Endangered Vascular Plants of California</i> , March 1994, Federal Register Vol 61, No. 40, February 28, 1996                                                                                                                  |                              |                                      |                     |                              |                              |          |





| WETLAND ACREAGE OF EXISTING PRESERVE |                  |                  |                           |                               | POTENTIAL FUTURE WETLAND IMPACTS AND OFFSITE COMPENSATION |                                 |                   |      |    |
|--------------------------------------|------------------|------------------|---------------------------|-------------------------------|-----------------------------------------------------------|---------------------------------|-------------------|------|----|
| WETLAND CLASSIFICATION               | EXISTING ACREAGE | PRESERVE ACREAGE | TOTAL SITE IMPACT ACREAGE | OFF-SITE COMPENSATION ACREAGE | NEW IMPACT LOCATION                                       | ADDITIONAL COMPENSATION ACREAGE | OFF-SITE LOCATION | DATE | BY |
| Upland Forest                        | 4.12             | 4.00             | 1.00                      | 0.00                          | 0                                                         | 0.00                            | 0.10              |      |    |
| Shrubland Forest                     | 3.00             | 0.01             | 0.11                      | 0.00                          | 0                                                         | 1.00                            | 0.10              |      |    |
| Perennial Wetland                    | 0.00             | 0.00             | 0.00                      | 0.00                          | 0                                                         | 0                               | 0                 |      |    |
| Seasonal Wetland                     | 1.00             | 1.10             | 0.01                      | 0.01                          | 0                                                         | 0.00                            | 0.00              |      |    |
| TOTAL                                | 8.12             | 5.11             | 1.12                      | 0.01                          | 0                                                         | 1.00                            | 0.20              |      |    |

VICINITY MAP

SCS SOIL TYPES

SEE D05T

**DIAMOND CREEK**

ON-SITE PRESERVATION

DATE: 10/10/1991 PROJECT: 10/10/1991

PREPARED BY: SUGNET & ASSOCIATES

DESIGNED BY: SUGNET & ASSOCIATES

CONSTRUCTED BY: SUGNET & ASSOCIATES

ENVIRONMENTAL CONSULTANTS





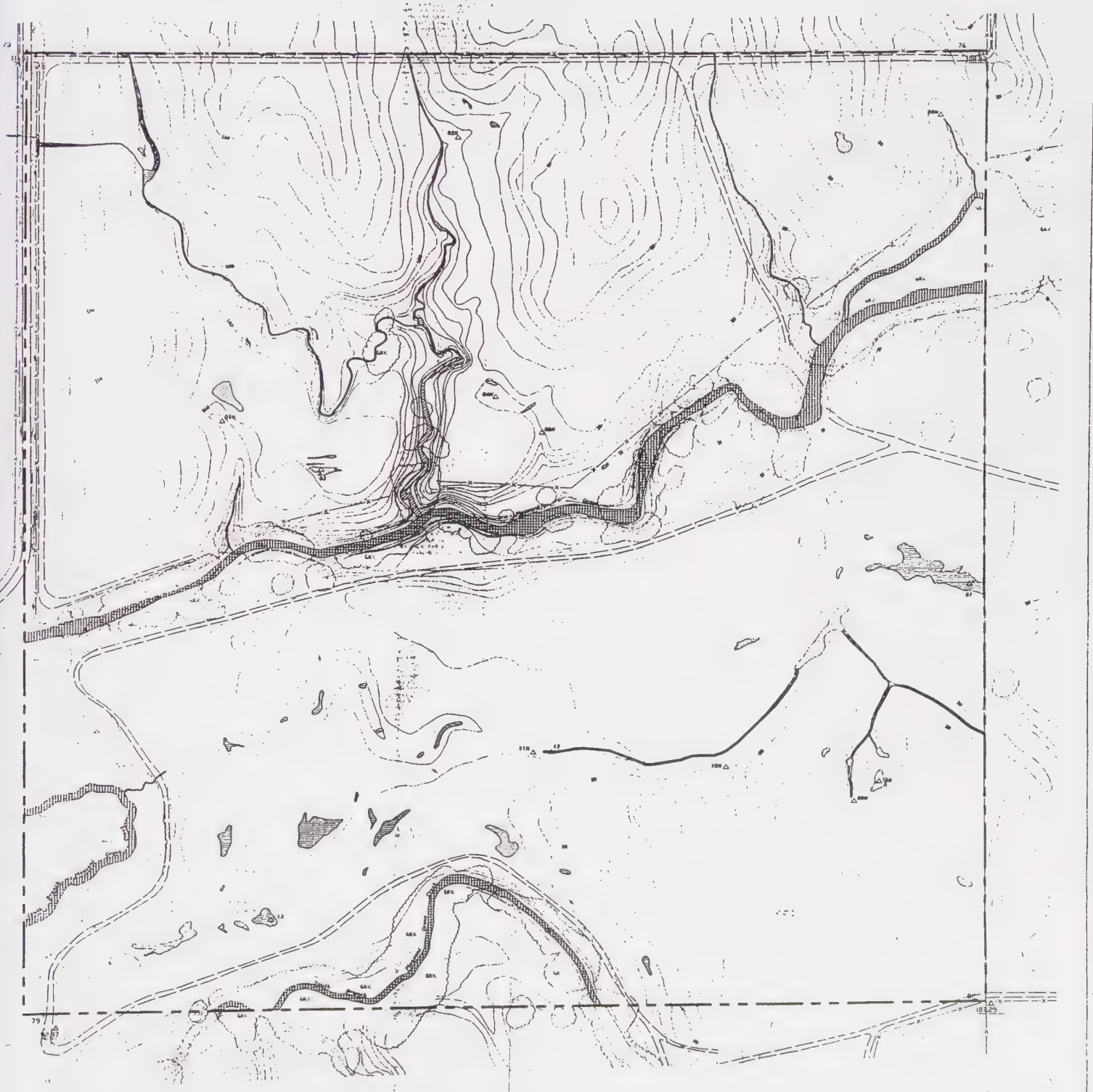












|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>WATERS OF THE U.S. ACRAGE</b></p> <p><b>CLASSIFICATION</b></p> <p>Partial Pool</p> <p>Seasonal Wetland</p> <p>Nonseasonal Wetland</p> <p>Wetland Shrub</p> <p>Wetland</p> <p><b>EXISTING ACRAGE</b></p> <p>0.00</p> <p>0.01</p> <p>0.02</p> <p>0.03</p> <p>0.04</p> <p>0.05</p> <p>0.06</p> <p>0.07</p> <p>0.08</p> <p>0.09</p> <p>0.10</p> <p>0.11</p> <p>0.12</p> <p>0.13</p> <p>0.14</p> <p>0.15</p> <p>0.16</p> <p>0.17</p> <p>0.18</p> <p>0.19</p> <p>0.20</p> <p>0.21</p> <p>0.22</p> <p>0.23</p> <p>0.24</p> <p>0.25</p> <p>0.26</p> <p>0.27</p> <p>0.28</p> <p>0.29</p> <p>0.30</p> <p>0.31</p> <p>0.32</p> <p>0.33</p> <p>0.34</p> <p>0.35</p> <p>0.36</p> <p>0.37</p> <p>0.38</p> <p>0.39</p> <p>0.40</p> <p>0.41</p> <p>0.42</p> <p>0.43</p> <p>0.44</p> <p>0.45</p> <p>0.46</p> <p>0.47</p> <p>0.48</p> <p>0.49</p> <p>0.50</p> <p>0.51</p> <p>0.52</p> <p>0.53</p> <p>0.54</p> <p>0.55</p> <p>0.56</p> <p>0.57</p> <p>0.58</p> <p>0.59</p> <p>0.60</p> <p>0.61</p> <p>0.62</p> <p>0.63</p> <p>0.64</p> <p>0.65</p> <p>0.66</p> <p>0.67</p> <p>0.68</p> <p>0.69</p> <p>0.70</p> <p>0.71</p> <p>0.72</p> <p>0.73</p> <p>0.74</p> <p>0.75</p> <p>0.76</p> <p>0.77</p> <p>0.78</p> <p>0.79</p> <p>0.80</p> <p>0.81</p> <p>0.82</p> <p>0.83</p> <p>0.84</p> <p>0.85</p> <p>0.86</p> <p>0.87</p> <p>0.88</p> <p>0.89</p> <p>0.90</p> <p>0.91</p> <p>0.92</p> <p>0.93</p> <p>0.94</p> <p>0.95</p> <p>0.96</p> <p>0.97</p> <p>0.98</p> <p>0.99</p> <p>1.00</p> <p>1.01</p> <p>1.02</p> <p>1.03</p> <p>1.04</p> <p>1.05</p> <p>1.06</p> <p>1.07</p> <p>1.08</p> <p>1.09</p> <p>1.10</p> <p>1.11</p> <p>1.12</p> <p>1.13</p> <p>1.14</p> <p>1.15</p> <p>1.16</p> <p>1.17</p> <p>1.18</p> <p>1.19</p> <p>1.20</p> <p>1.21</p> <p>1.22</p> <p>1.23</p> <p>1.24</p> <p>1.25</p> <p>1.26</p> <p>1.27</p> <p>1.28</p> <p>1.29</p> <p>1.30</p> <p>1.31</p> <p>1.32</p> <p>1.33</p> <p>1.34</p> <p>1.35</p> <p>1.36</p> <p>1.37</p> <p>1.38</p> <p>1.39</p> <p>1.40</p> <p>1.41</p> <p>1.42</p> <p>1.43</p> <p>1.44</p> <p>1.45</p> <p>1.46</p> <p>1.47</p> <p>1.48</p> <p>1.49</p> <p>1.50</p> <p>1.51</p> <p>1.52</p> <p>1.53</p> <p>1.54</p> <p>1.55</p> <p>1.56</p> <p>1.57</p> <p>1.58</p> <p>1.59</p> <p>1.60</p> <p>1.61</p> <p>1.62</p> <p>1.63</p> <p>1.64</p> <p>1.65</p> <p>1.66</p> <p>1.67</p> <p>1.68</p> <p>1.69</p> <p>1.70</p> <p>1.71</p> <p>1.72</p> <p>1.73</p> <p>1.74</p> <p>1.75</p> <p>1.76</p> <p>1.77</p> <p>1.78</p> <p>1.79</p> <p>1.80</p> <p>1.81</p> <p>1.82</p> <p>1.83</p> <p>1.84</p> <p>1.85</p> <p>1.86</p> <p>1.87</p> <p>1.88</p> <p>1.89</p> <p>1.90</p> <p>1.91</p> <p>1.92</p> <p>1.93</p> <p>1.94</p> <p>1.95</p> <p>1.96</p> <p>1.97</p> <p>1.98</p> <p>1.99</p> <p>2.00</p> <p>2.01</p> <p>2.02</p> <p>2.03</p> <p>2.04</p> <p>2.05</p> <p>2.06</p> <p>2.07</p> <p>2.08</p> <p>2.09</p> <p>2.10</p> <p>2.11</p> <p>2.12</p> <p>2.13</p> <p>2.14</p> <p>2.15</p> <p>2.16</p> <p>2.17</p> <p>2.18</p> <p>2.19</p> <p>2.20</p> <p>2.21</p> <p>2.22</p> <p>2.23</p> <p>2.24</p> <p>2.25</p> <p>2.26</p> <p>2.27</p> <p>2.28</p> <p>2.29</p> <p>2.30</p> <p>2.31</p> <p>2.32</p> <p>2.33</p> <p>2.34</p> <p>2.35</p> <p>2.36</p> <p>2.37</p> <p>2.38</p> <p>2.39</p> <p>2.40</p> <p>2.41</p> <p>2.42</p> <p>2.43</p> <p>2.44</p> <p>2.45</p> <p>2.46</p> <p>2.47</p> <p>2.48</p> <p>2.49</p> <p>2.50</p> <p>2.51</p> <p>2.52</p> <p>2.53</p> <p>2.54</p> <p>2.55</p> <p>2.56</p> <p>2.57</p> <p>2.58</p> <p>2.59</p> <p>2.60</p> <p>2.61</p> <p>2.62</p> <p>2.63</p> <p>2.64</p> <p>2.65</p> <p>2.66</p> <p>2.67</p> <p>2.68</p> <p>2.69</p> <p>2.70</p> <p>2.71</p> <p>2.72</p> <p>2.73</p> <p>2.74</p> <p>2.75</p> <p>2.76</p> <p>2.77</p> <p>2.78</p> <p>2.79</p> <p>2.80</p> <p>2.81</p> <p>2.82</p> <p>2.83</p> <p>2.84</p> <p>2.85</p> <p>2.86</p> <p>2.87</p> <p>2.88</p> <p>2.89</p> <p>2.90</p> <p>2.91</p> <p>2.92</p> <p>2.93</p> <p>2.94</p> <p>2.95</p> <p>2.96</p> <p>2.97</p> <p>2.98</p> <p>2.99</p> <p>3.00</p> <p>3.01</p> <p>3.02</p> <p>3.03</p> <p>3.04</p> <p>3.05</p> <p>3.06</p> <p>3.07</p> <p>3.08</p> <p>3.09</p> <p>3.10</p> <p>3.11</p> <p>3.12</p> <p>3.13</p> <p>3.14</p> <p>3.15</p> <p>3.16</p> <p>3.17</p> <p>3.18</p> <p>3.19</p> <p>3.20</p> <p>3.21</p> <p>3.22</p> <p>3.23</p> <p>3.24</p> <p>3.25</p> <p>3.26</p> <p>3.27</p> <p>3.28</p> <p>3.29</p> <p>3.30</p> <p>3.31</p> <p>3.32</p> <p>3.33</p> <p>3.34</p> <p>3.35</p> <p>3.36</p> <p>3.37</p> <p>3.38</p> <p>3.39</p> <p>3.40</p> <p>3.41</p> <p>3.42</p> <p>3.43</p> <p>3.44</p> <p>3.45</p> <p>3.46</p> <p>3.47</p> <p>3.48</p> <p>3.49</p> <p>3.50</p> <p>3.51</p> <p>3.52</p> <p>3.53</p> <p>3.54</p> <p>3.55</p> <p>3.56</p> <p>3.57</p> <p>3.58</p> <p>3.59</p> <p>3.60</p> <p>3.61</p> <p>3.62</p> <p>3.63</p> <p>3.64</p> <p>3.65</p> <p>3.66</p> <p>3.67</p> <p>3.68</p> <p>3.69</p> <p>3.70</p> <p>3.71</p> <p>3.72</p> <p>3.73</p> <p>3.74</p> <p>3.75</p> <p>3.76</p> <p>3.77</p> <p>3.78</p> <p>3.79</p> <p>3.80</p> <p>3.81</p> <p>3.82</p> <p>3.83</p> <p>3.84</p> <p>3.85</p> <p>3.86</p> <p>3.87</p> <p>3.88</p> <p>3.89</p> <p>3.90</p> <p>3.91</p> <p>3.92</p> <p>3.93</p> <p>3.94</p> <p>3.95</p> <p>3.96</p> <p>3.97</p> <p>3.98</p> <p>3.99</p> <p>4.00</p> <p>4.01</p> <p>4.02</p> <p>4.03</p> <p>4.04</p> <p>4.05</p> <p>4.06</p> <p>4.07</p> <p>4.08</p> <p>4.09</p> <p>4.10</p> <p>4.11</p> <p>4.12</p> <p>4.13</p> <p>4.14</p> <p>4.15</p> <p>4.16</p> <p>4.17</p> <p>4.18</p> <p>4.19</p> <p>4.20</p> <p>4.21</p> <p>4.22</p> <p>4.23</p> <p>4.24</p> <p>4.25</p> <p>4.26</p> <p>4.27</p> <p>4.28</p> <p>4.29</p> <p>4.30</p> <p>4.31</p> <p>4.32</p> <p>4.33</p> <p>4.34</p> <p>4.35</p> <p>4.36</p> <p>4.37</p> <p>4.38</p> <p>4.39</p> <p>4.40</p> <p>4.41</p> <p>4.42</p> <p>4.43</p> <p>4.44</p> <p>4.45</p> <p>4.46</p> <p>4.47</p> <p>4.48</p> <p>4.49</p> <p>4.50</p> <p>4.51</p> <p>4.52</p> <p>4.53</p> <p>4.54</p> <p>4.55</p> <p>4.56</p> <p>4.57</p> <p>4.58</p> <p>4.59</p> <p>4.60</p> <p>4.61</p> <p>4.62</p> <p>4.63</p> <p>4.64</p> <p>4.65</p> <p>4.66</p> <p>4.67</p> <p>4.68</p> <p>4.69</p> <p>4.70</p> <p>4.71</p> <p>4.72</p> <p>4.73</p> <p>4.74</p> <p>4.75</p> <p>4.76</p> <p>4.77</p> <p>4.78</p> <p>4.79</p> <p>4.80</p> <p>4.81</p> <p>4.82</p> <p>4.83</p> <p>4.84</p> <p>4.85</p> <p>4.86</p> <p>4.87</p> <p>4.88</p> <p>4.89</p> <p>4.90</p> <p>4.91</p> <p>4.92</p> <p>4.93</p> <p>4.94</p> <p>4.95</p> <p>4.96</p> <p>4.97</p> <p>4.98</p> <p>4.99</p> <p>5.00</p> <p>5.01</p> <p>5.02</p> <p>5.03</p> <p>5.04</p> <p>5.05</p> <p>5.06</p> <p>5.07</p> <p>5.08</p> <p>5.09</p> <p>5.10</p> <p>5.11</p> <p>5.12</p> <p>5.13</p> <p>5.14</p> <p>5.15</p> <p>5.16</p> <p>5.17</p> <p>5.18</p> <p>5.19</p> <p>5.20</p> <p>5.21</p> <p>5.22</p> <p>5.23</p> <p>5.24</p> <p>5.25</p> <p>5.26</p> <p>5.27</p> <p>5.28</p> <p>5.29</p> <p>5.30</p> <p>5.31</p> <p>5.32</p> <p>5.33</p> <p>5.34</p> <p>5.35</p> <p>5.36</p> <p>5.37</p> <p>5.38</p> <p>5.39</p> <p>5.40</p> <p>5.41</p> <p>5.42</p> <p>5.43</p> <p>5.44</p> <p>5.45</p> <p>5.46</p> <p>5.47</p> <p>5.48</p> <p>5.49</p> <p>5.50</p> <p>5.51</p> <p>5.52</p> <p>5.53</p> <p>5.54</p> <p>5.55</p> <p>5.56</p> <p>5.57</p> <p>5.58</p> <p>5.59</p> <p>5.60</p> <p>5.61</p> <p>5.62</p> <p>5.63</p> <p>5.64</p> <p>5.65</p> <p>5.66</p> <p>5.67</p> <p>5.68</p> <p>5.69</p> <p>5.70</p> <p>5.71</p> <p>5.72</p> <p>5.73</p> <p>5.74</p> <p>5.75</p> <p>5.76</p> <p>5.77</p> <p>5.78</p> <p>5.79</p> <p>5.80</p> <p>5.81</p> <p>5.82</p> <p>5.83</p> <p>5.84</p> <p>5.85</p> <p>5.86</p> <p>5.87</p> <p>5.88</p> <p>5.89</p> <p>5.90</p> <p>5.91</p> <p>5.92</p> <p>5.93</p> <p>5.94</p> <p>5.95</p> <p>5.96</p> <p>5.97</p> <p>5.98</p> <p>5.99</p> <p>6.00</p> <p>6.01</p> <p>6.02</p> <p>6.03</p> <p>6.04</p> <p>6.05</p> <p>6.06</p> <p>6.07</p> <p>6.08</p> <p>6.09</p> <p>6.10</p> <p>6.11</p> <p>6.12</p> <p>6.13</p> <p>6.14</p> <p>6.15</p> <p>6.16</p> <p>6.17</p> <p>6.18</p> <p>6.19</p> <p>6.20</p> <p>6.21</p> <p>6.22</p> <p>6.23</p> <p>6.24</p> <p>6.25</p> <p>6.26</p> <p>6.27</p> <p>6.28</p> <p>6.29</p> <p>6.30</p> <p>6.31</p> <p>6.32</p> <p>6.33</p> <p>6.34</p> <p>6.35</p> <p>6.36</p> <p>6.37</p> <p>6.38</p> <p>6.39</p> <p>6.40</p> <p>6.41</p> <p>6.42</p> <p>6.43</p> <p>6.44</p> <p>6.45</p> <p>6.46</p> <p>6.47</p> <p>6.48</p> <p>6.49</p> <p>6.50</p> <p>6.51</p> <p>6.52</p> <p>6.53</p> <p>6.54</p> <p>6.55</p> <p>6.56</p> <p>6.57</p> <p>6.58</p> <p>6.59</p> <p>6.60</p> <p>6.61</p> <p>6.62</p> <p>6.63</p> <p>6.64</p> <p>6.65</p> <p>6.66</p> <p>6.67</p> <p>6.68</p> <p>6.69</p> <p>6.70</p> <p>6.71</p> <p>6.72</p> <p>6.73</p> <p>6.74</p> <p>6.75</p> <p>6.76</p> <p>6.77</p> <p>6.78</p> <p>6.79</p> <p>6.80</p> <p>6.81</p> <p>6.82</p> <p>6.83</p> <p>6.84</p> <p>6.85</p> <p>6.86</p> <p>6.87</p> <p>6.88</p> <p>6.89</p> <p>6.90</p> <p>6.91</p> <p>6.92</p> <p>6.93</p> <p>6.94</p> <p>6.95</p> <p>6.96</p> <p>6.97</p> <p>6.98</p> <p>6.99</p> <p>7.00</p> <p>7.01</p> <p>7.02</p> <p>7.03</p> <p>7.04</p> <p>7.05</p> <p>7.06</p> <p>7.07</p> <p>7.08</p> <p>7.09</p> <p>7.10</p> <p>7.11</p> <p>7.12</p> <p>7.13</p> <p>7.14</p> <p>7.15</p> <p>7.16</p> <p>7.17</p> <p>7.18</p> <p>7.19</p> <p>7.20</p> <p>7.21</p> <p>7.22</p> <p>7.23</p> <p>7.24</p> <p>7.25</p> <p>7.26</p> <p>7.27</p> <p>7.28</p> <p>7.29</p> <p>7.30</p> <p>7.31</p> <p>7.32</p> <p>7.33</p> <p>7.34</p> <p>7.35</p> <p>7.36</p> <p>7.37</p> <p>7.38</p> <p>7.39</p> <p>7.40</p> <p>7.41</p> <p>7.42</p> <p>7.43</p> <p>7.44</p> <p>7.45</p> <p>7.46</p> <p>7.47</p> <p>7.48</p> <p>7.49</p> <p>7.50</p> <p>7.51</p> <p>7.52</p> <p>7.53</p> <p>7.54</p> <p>7.55</p> <p>7.56</p> <p>7.57</p> <p>7.58</p> <p>7.59</p> <p>7.60</p> <p>7.61</p> <p>7.62</p> <p>7.63</p> <p>7.64</p> <p>7.65</p> <p>7.66</p> <p>7.67</p> <p>7.68</p> <p>7.69</p> <p>7.70</p> <p>7.71</p> <p>7.72</p> <p>7.73</p> <p>7.74</p> <p>7.75</p> <p>7.76</p> <p>7.77</p> <p>7.78</p> <p>7.79</p> <p>7.80</p> <p>7.81</p> <p>7.82</p> <p>7.83</p> <p>7.84</p> <p>7.85</p> <p>7.86</p> <p>7.87</p> <p>7.88</p> <p>7.89</p> <p>7.90</p> <p>7.91</p> <p>7.92</p> <p>7.93</p> <p>7.94</p> <p>7.95</p> <p>7.96</p> <p>7.97</p> <p>7.98</p> <p>7.99</p> <p>8.00</p> <p>8.01</p> <p>8.02</p> <p>8.03</p> <p>8.04</p> <p>8.05</p> <p>8.06</p> <p>8.07</p> <p>8.08</p> <p>8.09</p> <p>8.10</p> <p>8.11</p> <p>8.12</p> <p>8.13</p> <p>8.14</p> <p>8.15</p> <p>8.16</p> <p>8.17</p> <p>8.18</p> <p>8.19</p> <p>8.20</p> <p>8.21</p> <p>8.22</p> <p>8.23</p> <p>8.24</p> <p>8.25</p> <p>8.26</p> <p>8.27</p> <p>8.28</p> <p>8.29</p> <p>8.30</p> <p>8.31</p> <p>8.32</p> <p>8.33</p> <p>8.34</p> <p>8.35</p> <p>8.36</p> <p>8.37</p> <p>8.38</p> <p>8.39</p> <p>8.40</p> <p>8.41</p> <p>8.42</p> <p>8.43</p> <p>8.44</p> <p>8.45</p> <p>8.46</p> <p>8.47</p> <p>8.48</p> <p>8.49</p> <p>8.50</p> <p>8.51</p> <p>8.52</p> <p>8.53</p> <p>8.54</p> <p>8.55</p> <p>8.56</p> <p>8.57</p> <p>8.58</p> <p>8.59</p> <p>8.60</p> <p>8.61</p> <p>8.62</p> <p>8.63</p> <p>8.64</p> <p>8.65</p> <p>8.66</p> <p>8.67</p> <p>8.68</p> <p>8.69</p> <p>8.70</p> <p>8.71</p> <p>8.72</p> <p>8.73</p> <p>8.74</p> <p>8.75</p> <p>8.76</p> <p>8.77</p> <p>8.78</p> <p>8.79</p> <p>8.80</p> <p>8.81</p> <p>8.82</p> <p>8.83</p> <p>8.84</p> <p>8.85</p> <p>8.86</p> <p>8.87</p> <p>8.88</p> <p>8.89</p> <p>8.90</p> <p>8.91</p> <p>8.92</p> <p>8.93</p> <p>8.94</p> <p>8.95</p> <p>8.96</p> <p>8.97</p> <p>8.98</p> <p>8.99</p> <p>9.00</p> <p>9.01</p> <p>9.02</p> <p>9.03</p> <p>9.04</p> <p>9.05</p> <p>9.06</p> <p>9.07</p> <p>9.08</p> <p>9.09</p> <p>9.10</p> <p>9.11</p> <p>9.12</p> <p>9.13</p> <p>9.14</p> <p>9.15</p> <p>9.16</p> <p>9.17</p> <p>9.18</p> <p>9.19</p> <p>9.20</p> <p>9.21</p> <p>9.22</p> <p>9.23</p> <p>9.24</p> <p>9.25</p> <p>9.26</p> <p>9.27</p> <p>9.28</p> <p>9.29</p> <p>9.30</p> <p>9.31</p> <p>9.32</p> <p>9.33</p> <p>9.34</p> <p>9.35</p> <p>9.36</p> <p>9.37</p> <p>9.38</p> <p>9.39</p> <p>9.40</p> <p>9.41</p> <p>9.42</p> <p>9.43</p> <p>9.44</p> <p>9.45</p> <p>9.46</p> <p>9.47</p> <p>9.48</p> <p>9.49</p> <p>9.50</p> <p>9.51</p> <p>9.52</p> <p>9.53</p> <p>9.54</p> <p>9.55</p> <p>9.56</p> <p>9.57</p> <p>9.58</p> <p>9.59</p> <p>9.60</p> <p>9.61</p> <p>9.62</p> <p>9.63</p> <p>9.64</p> <p>9.65</p> <p>9.66</p> <p>9.67</p> <p>9.68</p> <p>9.69</p> <p>9.70</p> <p>9.71</p> <p>9.72</p> <p>9.73</p> <p>9.74</p> <p>9.75</p> <p>9.76</p> <p>9.77</p> <p>9.78</p> <p>9.79</p> <p>9.80</p> <p>9.81</p> <p>9.82</p> <p>9.83</p> <p>9.84</p> <p>9.85</p> <p>9.86</p> <p>9.87</p> <p>9.88</p> <p>9.89</p> <p>9.90</p> <p>9.91</p> <p>9.92</p> <p>9.93</p> <p>9.94</p> <p>9.95</p> <p>9.96</p> <p>9.97</p> <p>9.98</p> <p>9.99</p> <p>10.00</p> <p>10.01</p> <p>10.02</p> <p>10.03</p> <p>10.04</p> <p>10.05</p> <p>10.06</p> <p>10.07</p> <p>10.08</p> <p>10.09</p> <p>10.10</p> <p>10.11</p> <p>10.12</p> <p>10.13</p> <p>10.14</p> <p>10.15</p> <p>10.16</p> <p>10.17</p> <p>10.18</p> <p>10.19</p> <p>10.20</p> <p>10.21</p> <p>10.22</p> <p>10.23</p> <p>10.24</p> <p>10.25</p> <p>10.26</p> <p>10.27</p> <p>10.28</p> <p>10.29</p> <p>10.30</p> <p>10.31</p> <p>10.32</p> <p>10.33</p> <p>10.34</p> <p>10.35</p> <p>10.36</p> <p>10.37</p> <p>10.38</p> <p>10.39</p> <p>10.40</p> <p>10.41</p> <p>10.42</p> <p>10.43</p> <p>10.44</p> <p>10.45</p> <p>10.46</p> <p>10.47</p> <p>10.48</p> <p>10.49</p> <p>10.50</p> <p>10.51</p> <p>10.52</p> <p>10.53</p> <p>10.54</p> <p>10.55</p> <p>10.56</p> <p>10.57</p> <p>10.58</p> <p>10.59</p> <p>10.60</p> <p>10.61</p> <p>10.62</p> <p>10.63</p> <p>10.64</p> <p>10.65</p> <p>10.66</p> <p>10.67</p> <p>10.68</p> <p>10.69</p> <p>10.70</p> <p>10.71</p> <p>10.72</p> <p>10.73</p> <p>10.74</p> <p>10.75</p> <p>10.76</p> <p>10.77</p> <p>10.78</p> <p>10.79</p> <p>10.80</p> <p>10.81</p> <p>10.82</p> <p>10.83</p> <p>10.84</p> <p>10.85</p> <p>10.86</p> <p>10.87</p> <p>10.88</p> <p>10.89</p> <p>10.90</p> <p>10.91</p> <p>10.92</p> <p>10.93</p> <p>10.94</p> <p>10.95</p> <p>10.96</p> <p>10.97</p> <p>10.98</p> <p>10.99</p> <p>11.00</p> <p>11.01</p> <p>11.02</p> <p>11.03</p> <p>11.04</p> <p>11.05</p> <p>11.06</p> <p>11.07</p> <p>11.08</p> <p>11.09</p> <p>11.10</p> <p>11.11</p> <p>11.12</p> <p>11.13</p> <p>11.14</p> <p>11.15</p> <p>11.16</p> <p>11.17</p> <p>11.18</p> <p>11.19</p> <p>11.20</p> <p>11.21</p> <p>11.22</p> <p>11.23</p> <p>11.24</p> <p>11.25</p> <p>11.26</p> <p>11.27</p> <p>11.28</p> <p>11.29</p> <p>11.30</p> <p>11.31</p> <p>11.32</p> <p>11.33</p> <p>11.34</p> <p>11.35</p> <p>11.36</p> <p>11.37</p> <p>11.38</p> <p>11.39</p> <p>11.40</p> <p>11.41</p> <p>11.42</p> <p>11.43</p> <p>11.44</p> <p>11.45</p> <p>11.46</p> <p>11.47</p> <p>11.48</p> <p>11.49</p> <p>11.50</p> <p>11.51</p> <p>11.52</p> <p>11.53</p> <p>11.54</p> <p>11.55</p> <p>11.56</p> <p>11.57</p> <p>11.58</p> <p>11.59</p> <p>11.60</p> <p>11.61</p> <p>11.62</p> <p>11.63</p> <p>11.64</p> <p>11.65</p> <p>11.66</p> <p>11.67</p> <p>11.68</p> <p>11.69</p> <p>11.70</p> <p>11.71</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|









---

---

***APPENDIX F***  
***HAZARDOUS MATERIALS INFORMATION***

---

---



---

---

## *APPENDIX F - HAZARDOUS MATERIALS*

---

---

This appendix contains additional information regarding hazardous materials and the federal, state, and local requirements for the management of these materials.

### Definitions

The term "hazardous materials" refers to both hazardous substances and hazardous wastes. This EIR uses the definition stated in the California Health and Safety Code (CHSC) § 25501:

A hazardous material is any material that, because of its quantity, concentration, or physical, chemical characteristics poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

A material is also considered as hazardous if it appears on a list of hazardous materials prepared by a federal, state or local regulatory agency. For example, an "acutely hazardous material" (AHM) is any chemical designated an extremely hazardous substance that is listed in Appendix A, Part 355, Title 40, Code of Federal Regulations (CHSC § 25532).

As defined in CHSC § 25117:

Hazardous waste means a waste or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may either: (a) cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible, illness, or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed.

The terms "toxic materials" and "hazardous materials" are often mistakenly interchanged. Toxic materials or substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability, or death. Other materials may be corrosive or react with other substances to form other hazardous materials, but their toxic properties are limited. Therefore, because toxic materials can result in health effects, they are considered hazardous materials, but not all hazardous materials are toxic.

**Radioactive materials** and wastes contain radioisotopes (or radionuclides), which are atoms with an unstable combination of neutrons and protons. In order to achieve stability, the atom emits energy in the form of ionizing radiation. The process of emitting radiation is called radioactive decay. As radioactive materials decay, the amount of radiation decreases. The length of time it takes for one-half of the original amount of radioactivity to decay is called the half-life.

**Biohazardous materials** include biohazardous laboratory wastes; microbiologic specimens sent for analysis; specimens or tissues removed during surgery that are suspected of containing an infectious agent; animal parts, tissues, or fluids suspected of containing an infectious agent; fluid blood from animals known to be infected with a highly communicable disease; and discarded materials contaminated with excretion, exudate, or secretions from quarantined animals or humans.<sup>1</sup> Examples of potentially biohazardous laboratory wastes include cultures from medical and pathological laboratories; cultures of infectious agents from research laboratories; wastes from growing bacteria, working with viruses, and using spores; and discarded live and attenuated vaccines.

An **infectious agent** is any microorganism, bacteria, mold, parasite, or virus that normally causes or significantly contributes to increased human mortality.<sup>2</sup> Infectious agents have also been defined in the Code of Federal Regulations (CFR) as any material that contains an organism capable of being communicated by invading and multiplying in body tissues.<sup>3</sup>

**Sharps** are devices capable of cutting or piercing, such as hypodermic needles, razor blades, and broken glass.<sup>4</sup>

**Medical waste** is a general term that includes both biohazardous and sharps waste.<sup>5</sup> The term "infectious waste" is no longer used.

## **Risk of Exposure**

### **Hazard vs. Risk**

Worker and public health are potentially at risk whenever hazardous materials have been or will be used. It is necessary to differentiate between the "hazard" of these materials and the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to human health and the environment is determined by the probability of exposure to hazardous material and severity of harm such exposure would pose. That is to say, the likelihood and means of exposure, in addition to the inherent toxicity of a material used to determine the degree of risk to human health. For example, a high probability of exposure to a low toxicity chemical would not necessarily pose an unacceptable health risk, whereas a low probability of exposure to a very high toxicity chemical might.

When the risk of an activity is judged acceptable by society, in relation to perceived benefits, then the activity is judged to be safe. For example, chlorine is a common household chemical whose use has been judged safe in our society. Although it can be hazardous to health, irritating the eyes, respiratory tract and skin, and even causing bronchitis or pneumonia following severe exposures, the risk of such a severe exposure is believed to be low because of its benefits as a cleaner and disinfectant are high. Therefore, the use of household chlorine is thought to be a safe activity.



## Health Effects of Exposure to Hazardous Materials

The potential effects of exposure to hazardous materials are a function of a complex interaction of factors: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form (e.g., liquid, vapor) and characteristics (e.g., toxicity) of the material; how often and for how long; and the individual's unique biological characteristics such as age, weight, sex, and general health.

Certain organs or systems are more susceptible to injury than others. Health effects depend on whether a hazardous material enters the body through the mouth (ingestion), the lungs (inhalation), the skin or eyes (absorption), or an open wound or puncture (injection). The physical form of the material is also important. For example, a chemical splashed on the skin might not cause any damage because the skin acts as a barrier. But if an individual inhaled vapors from the same chemical, the effect could be more serious because lung cells can readily transport the material into the blood stream. From there, it can easily enter other organs, which may be damaged.

Because toxic or other harmful properties can vary greatly from one material to the next, the amount of material to which an individual is exposed and whether that amount will result in any damage also varies greatly. For example, ingestion of a 1,000 milligrams of acetaminophen (an active ingredient in some non-aspirin, over-the-counter pain relievers) could cause serious health effects in some individuals, whereas ingestion of the same amount of sodium chloride (table salt) would not likely show any detrimental effects in most individuals.

Potential health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects, which may result from a single exposure to a hazardous material, can include damage to organs or systems in the body, and possibly death, depending on the amount or type of material. Chronic effects, which may result from long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

Common groups of hazardous materials and potential associated hazards are shown in Table F-1.

TABLE F-1

**COMMON GROUPS OF HAZARDOUS MATERIALS AND  
POTENTIAL ASSOCIATED HAZARDS**

| <b>Hazard Group</b>                   | <b>Description</b>                                                                                                                                                                              |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Toxics                                | Substances that can cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability or death. Examples: heavy metals, chlorinated pesticides, solvents. |
| Reactives                             | Materials, including explosives, other than strong acids or bases that react violently with water to produce fire or toxic fumes. Examples: hydrogen cyanide, pure sodium metal.                |
| Oxidizers                             | Materials that release oxygen or add to the intensity of a fire. Examples: sulfuric acid, chlorine, peroxide.                                                                                   |
| Flammables/Combustibles<br>Ignitables | Liquids or solids that readily burn. Examples: gasoline, acetone, natural gas.                                                                                                                  |
| Corrosives/Irritants                  | Materials that are strong acids or bases, will corrode metal or irritate skin/respiratory systems, and can react violently with water. Examples: nitric acid, sodium hydroxide.                 |
| Radioactives                          | Materials or sources of ionizing radiation that can potentially cause short-term or long-lasting health effects. Examples: phosphorus 32, tritium, sulfur 35.                                   |
| Biohazardous materials                | Materials containing microorganisms, bacteria, parasites, or viruses that can cause disease. Examples: needles and cultures from medical offices.                                               |
| Carcinogens, teratogens, mutagens     | Special classes of toxic substances that can cause cancer (carcinogens), reproductive effects (teratogens), or genetic damage (mutagens).                                                       |
| SOURCE: EIP Associates, 1995.         |                                                                                                                                                                                                 |

## **Regulatory Framework for Hazardous Materials**

Hazardous materials management activities are subject to numerous laws and regulations at all levels of government. These laws apply to the City of Roseville just as they do to all hazardous materials users. A summary of applicable laws and regulations is shown in Table F-2.

### **Hazardous Materials Management Planning**

#### **Federal**

As of January 1991, Fed/OSHA requires a written Chemical Hygiene Plan for operations which use hazardous chemicals. Standards for Chemical Hygiene Plans emphasize safe handling and use of hazardous chemicals through procedures established by individual employers. The Chemical Hygiene Plans outline specific work practices and procedures (including employee training) that ensure employee protection from health hazards associated with hazardous chemicals.

#### **State**

State law requires detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and to prevent or minimize injury to human health or the environment in the event such materials are accidentally released. Federal laws, such as the Emergency Planning and Community-Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act, or SARA Title III) impose similar requirements.

The Hazardous Materials Release Response Plans and Inventory Law of 1985 (or the Business Plan Act, *California Health and Safety Code*, Chapter 6.95) requires that a business that uses, handles, or stores hazardous materials above a certain quantity prepare a plan, which must include:

- 1) details, including floor plans, of the facility;
- 2) an inventory of hazardous materials handled or stored;
- 3) an emergency response plan; and
- 4) a training program in safety procedures and emergency response for new employees, including annual refresher courses.

In addition, under the terms of State legislation passed in 1989 (AB 3777-LaFollette), a Risk Management and Prevention Plan (RMPP) may be required for businesses that use acutely hazardous materials and meet certain criteria. A RMPP is the sum total of programs aimed at minimizing the risks associated with acutely hazardous materials. This can include, but is not limited to:

- 1) systems safety review of design for new and existing equipment;



- 2) safety evaluation of standard operating procedures;
- 3) system review for reliability, both human and equipment/facility;
- 4) preventive maintenance procedures;
- 5) risk assessment for failure of specific pieces of equipment or operating alternatives;
- 6) emergency response planning; and
- 7) internal or external auditing procedures to ensure that safety programs and safety engineering controls are being executed as planned.

In general, this law requires that businesses that handle acutely hazardous materials in excess of a certain quantity prepare a RMPP which includes a hazard and operability study (HAZOP). For hazards identified in the HAZOP, the business must conduct an off-site consequence analysis of the potential release of any acutely hazardous material.

| <b>TABLE F-2</b>                                                     |                     |                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SUMMARY OF HAZARDOUS MATERIALS REGULATORY AUTHORITY</b>           |                     |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Regulatory Agency</b>                                             | <b>Jurisdiction</b> | <b>Authority</b>                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Federal Agencies</b>                                              |                     |                                                                                                                                                                                                                                                                                                                                                                                         |
| Dept. of Transportation                                              | Federal             | Hazardous Materials Transportation Act                                                                                                                                                                                                                                                                                                                                                  |
| Environmental Protection Agency                                      | Federal             | Clean Water Act (CWA)<br>Clean Air Act (CAA)<br>Resource Conservation & Recovery Act (RCRA)<br>Comprehensive Environmental Response, Compensation & Liability Act (CERCLA)<br>Superfund Amendments & Reauthorization Act (SARA)<br>Federal Insecticide, Fungicide & Rodenticide Act (FIFRA)<br>Toxic Substances Control Act (TSCA)<br>Asbestos Hazardous Emergency Response Act (AHERA) |
| Nuclear Regulatory Commission                                        | Federal             | Atomic Energy Act (Radiation Safety)                                                                                                                                                                                                                                                                                                                                                    |
| Department of Health and Human Services, Centers for Disease Control | Federal             | National Institutes of Health Biosafety Guidelines                                                                                                                                                                                                                                                                                                                                      |
| Occupational Safety & Health Administration                          | Federal             | Occupational Safety and Health Act                                                                                                                                                                                                                                                                                                                                                      |
| <b>State Agencies</b>                                                |                     |                                                                                                                                                                                                                                                                                                                                                                                         |



**TABLE F-2****SUMMARY OF HAZARDOUS MATERIALS REGULATORY AUTHORITY**

| <b>Regulatory Agency</b>                                                   | <b>Jurisdiction</b> | <b>Authority</b>                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dept. of Toxic Substances Control                                          | State               | Hazardous Waste Control Law<br>Hazardous Materials Release Response Plans/Inventory Law<br>Acutely Hazardous Materials Law<br>Sherman Food, Drug and Cosmetic Law<br>Underground Storage Tanks Law<br>Hazardous Waste Source Reduction Control Act (SB 14)<br>State Superfund, RCRA |
| Dept. of Health Services                                                   | State               | Tanner Act (Hazardous Waste Facility Siting)<br>Safe Drinking Water Act<br>Lead Inspection and Abatement<br>Medical Waste Management Act<br>California Radiation Control Law                                                                                                        |
| Dept. of Industrial Relations (Cal/OSHA)                                   | State               | California Occupational Safety & Health Act                                                                                                                                                                                                                                         |
| State Water Resources Control Board & Regional Water Quality Control Board | State               | Porter-Cologne Water Quality Act<br>Clean Water Act<br>Toxic Pits Cleanup Act<br>Underground Storage Tanks Law                                                                                                                                                                      |
| Integrated Waste Management Board                                          | State               | Source Reduction and Recovery, Household Hazardous Waste Element (AB 939)                                                                                                                                                                                                           |
| Health & Welfare Agency                                                    | State               | Safe Drinking Water & Toxic Enforcement Act (Proposition 65)                                                                                                                                                                                                                        |
| Air Resources Board                                                        | State               | Clean Air Act<br>Air Toxics Law and Air Toxics Hot Spots                                                                                                                                                                                                                            |
| Office of Emergency Services                                               | State               | Hazardous Materials Release Response Plans/Inventory Law                                                                                                                                                                                                                            |
| Dept. of Fish & Game                                                       | State               | Fish & Game Code                                                                                                                                                                                                                                                                    |
| Dept. of Food & Agriculture                                                | State               | Food & Agriculture Code                                                                                                                                                                                                                                                             |
| State Fire Marshal                                                         | State               | Uniform Fire Code<br>Pipeline Safety Act                                                                                                                                                                                                                                            |
| <b>Local Agencies</b>                                                      |                     |                                                                                                                                                                                                                                                                                     |
| Roseville Fire Department                                                  | City                | Pipeline Safety Act<br>Uniform Fire Code Article 80<br>Hazardous Materials Release Response Plans/Inventory Law<br>Underground Fuel Tanks                                                                                                                                           |
| Placer County Air Pollution Control District                               | City/County         | Air Toxics Law (AB 1807)<br>Air Toxics Hot Spots<br>Calderon (AB 3525)<br>Clean Air Act                                                                                                                                                                                             |
| Placer County Office of Emergency Services                                 | County              | SARA Title III                                                                                                                                                                                                                                                                      |
| Placer County Agricultural Commissioner                                    | County              | Food and Agriculture Code<br>Pesticide Contamination Prevention Act                                                                                                                                                                                                                 |

**TABLE F-2****SUMMARY OF HAZARDOUS MATERIALS REGULATORY AUTHORITY**

| <b>Regulatory Agency</b>                                                                  | <b>Jurisdiction</b> | <b>Authority</b>                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Placer County Department of Health and Medical Services, Division of Environmental Health | County              | Hazardous Waste Control Law<br>Hazardous Waste Management Plan (Tanner Act, AB 2948)<br>Integrated Waste Management Act (AB 939)<br>Safe Drinking Water Act<br>Safe Drinking Water & Toxic Enforcement Act (Proposition 65)<br>Hazardous Waste Source Reduction Act (SB 14) |

SOURCE: EIP Associates, 1995.

## **Hazardous Materials Worker Safety Requirements**

### Federal

The Federal Occupational Safety and Health Administration (Fed/OSHA) is the agency responsible for ensuring worker safety. Fed/OSHA sets federal standards for implementation of training in the work place, exposure limits, and safety procedures in the handling of hazardous substances (as well as other hazards). Fed/OSHA also establishes criteria by which each state can implement its own health and safety program.

### State

The California Department of Industrial Relations, Division of Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing work place safety regulations within the State. Cal/OSHA standards are more stringent than federal regulations. Worker safety programs described in Title 8 of the CCR include:

- Injury and Illness Prevention Program
- Emergency Action Plan
- Hazard Communication
- Bloodborne Pathogen Standard
- Hazardous Waste Operations and Emergency Response
- Process Safety Management

Cal/OSHA regulations concerning the management of hazardous materials include requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the Hazard Communication Program regulations, which include provisions for identifying and labeling hazardous materials, providing employees with Material Safety Data Sheets (MSDSs), describing the hazards of chemicals, and documenting employee training programs. Additionally, provisions of the Injury and Illness Prevention Program and Bloodborne Pathogen Program, which include similar elements that must be addressed on a site-specific basis, are enforced by Cal/OSHA and the Department of Health Services (DHS), respectively.

State laws also include special provisions for hazard communication to employees in laboratories, including training in chemical work practices (Laboratory Safety Standard). The documented training must include safe methods for handling hazardous materials, an explanation of MSDSs, use of protective equipment, and emergency response plans and procedures. Cal/OSHA also enforces the Process Safety Management Program, which is required for operations in which acutely hazardous materials (AHMs) are used.



## Hazardous Waste Management Requirements

### Federal

The RCRA established a federal hazardous waste "cradle-to-grave" regulatory program that is administered by EPA. Under the RCRA, EPA regulates the generation, transportation, treatment, storage and disposal of hazardous waste.

The RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle-to-grave" system of regulating hazardous waste. The HSWA specifically prohibits the use of certain techniques for the disposal of some hazardous waste.

Under the RCRA, individual states may implement their own hazardous waste management programs as long as they are consistent with, and at least as strict as, the RCRA. EPA must approve state hazardous waste management programs intended to be implemented in lieu of the federal requirements and the RCRA.

### State

In California, the state hazardous waste management program was approved on August 1, 1992. The state program was created by the enactment of the HWCL, which is administered by the DTSC. The DTSC regulations govern the generation, transportation and disposal of hazardous waste.

Regulations implementing the HWCL list 791 hazardous chemicals and 20 or 30 more common materials that may be hazardous; establish criteria for identifying, packaging and labeling hazardous waste; prescribe management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal and transportation; and identify hazardous waste that cannot be deposited in landfills.

As defined in CCR Title 22, §66261 et seq., a waste is considered hazardous if it has one or more of the following characteristics.

- Toxicity. Substances that may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability, or death. For example, such substances can cause disorientation, acute allergic reactions, asphyxiation, skin irritation, or other adverse health effects if human exposure exceeds certain levels. (The level depends on the substance involved.) Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include benzene, which is a component of gasoline and a suspected carcinogen and DDT (a pesticide no longer in use).
- Ignitability. These substances are hazardous because of their ability to burn. Gasoline, hexane, and natural gas are examples of ignitable substances.
- Corrosivity. Corrosive substances can cause severe burns or damage materials; these include strong acids and bases such as sodium hydroxide (lye) or sulfuric acid (battery acid).
- Reactivity. These substances may cause explosions or generate toxic gases. Explosives, pure sodium or potassium metals (which react violently with water), and cyanides are examples of reactive materials.



In California, a waste is also considered hazardous if it specifically listed or incorporated by reference from federal RCRA lists into Title 22, Chapter 11 of the CCR.

Under both the RCRA and the HWCL, the generator of a hazardous waste must complete a manifest that accompanies the waste from the point of generation to the ultimate treatment, storage or disposal location. The manifest describes the waste, its intended destination, and other regulatory information about the waste. Copies must be filed with the DTSC. Generators must also match copies of waste manifests with receipts from the treatment, storage or disposal facility to which it sends waste.

## **Hazardous Materials Transportation**

### Federal

The U.S. Department of Transportation (DOT) has the regulatory responsibility for the safe transportation of hazardous material between states and to foreign countries. DOT regulations govern all means of hazardous materials transportation, (except for those packages shipped by mail, which are covered by the U.S. Postal Service (USPS) regulations), including transportation by rail. DOT regulations are contained in the Code of Federal Regulations Title 49.

Under RCRA, the EPA sets standards for transporters of hazardous waste. In turn, the federal government authorized the State of California to carry out EPA regulations concerning transportation of hazardous wastes originating in, or passing through, the state.

### State

The State of California has also adopted regulations for the intrastate movement of hazardous materials. State regulations are indexed in the CCR Title 26.

The California Highway Patrol (CHP) has primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. The CHP enforces hazardous materials labeling and packaging regulations. The goal of these regulations is to prevent leakage and spills of material in transit and to provide detailed information to clean-up crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of the CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance.

Common carriers conduct a large portion of their business in the delivery of hazardous materials. Common carriers are licensed by the CHP under conditions specified in CCR Title 26, Division 14.1 Transportation of Hazardous Material, Section 32000.5, License to Transport Hazardous Materials. This section requires licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards. If the supplier or distributor carries fewer than 1,000 pounds of material, a license is not required. Every package type used by a hazardous materials shipper must undergo tests that imitate some of the possible rigors of travel.

## **Emergency Response to Hazardous Materials Incidents**

Pursuant to the Emergency Services Act, the State has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government agencies and private persons. Response to hazardous materials incidents is one part of this plan (*California Government Code*, §8574.1 et seq.). The plan is administered by the state Office of Emergency Services, which coordinates the responses of other agencies including the EPA, the CHP, the Department of Fish and Game, the Central Valley Regional Water Quality Control Board (CVRWQCB), the Department of Health Services, the Department of Toxic Substances Control, Placer County, and the City of Roseville.

In addition, pursuant to the Hazardous Materials Release Response Plans and Inventory Law of 1985 (the Business Plan Law), local agencies are required to develop area plans for response to hazardous materials releases. These emergency response plans depend to a large extent on the business plans submitted by entities that handle hazardous materials. An area plan must include pre-emergency planning of procedures for emergency response, notification and coordination of affected government agencies and responsible parties, training, and follow-up.

## ENDNOTES

1. California Health and Safety Code § 25020.5.
2. California Health and Safety Code, § 25022.5.
3. Code of Federal Regulations, Title 40, § 259.10.
4. California Health and Safety Code, § 25026.5.
5. California Health and Safety Code, § 25032.2.





---

---

***APPENDIX G***  
***AIR QUALITY INFORMATION***

---

---



---

---

## ***APPENDIX G - AIR QUALITY***

---

---

### **G.1 EXISTING AIR QUALITY**

Three ambient air pollutant stations are in the vicinity of the Specific Plan area. The nearest monitoring stations are located at 151 North Sunrise Avenue in Roseville, about three and one half miles southeast of the Plan Area, and the North Highlands station in Sacramento County, about three and one half miles southwest of the Plan Area. The next-nearest monitoring facility is located at 5000 Rocklin Road in Rocklin, about five miles east of the Plan area. Recent ozone, CO, and PM<sub>10</sub> data collected at these three stations are summarized in Table G-1.

### **G.2 CALINE4 MODELING**

Carbon monoxide concentrations are predicted at intersections using CALINE4, the fourth generation California Line Source Dispersion Model, developed by Caltrans. Table G-2 presents the assumptions for inputs used in the CALINE4 model used in this EIR.

TABLE G-1

**SUMMARY OF AIR POLLUTANT DATA COMPARED TO RELEVANT FEDERAL AND STATE AMBIENT  
AIR QUALITY STANDARDS,  
1993-1995<sup>1</sup>**

| POLLUTANT                                                                                                                                                                                                                                                                                                                                                                                                  | 1992 |       |      | 1993 |      |       | 1994 |      |       | 1995 <sup>2</sup> |      |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|------|------|------|-------|------|------|-------|-------------------|------|------|
|                                                                                                                                                                                                                                                                                                                                                                                                            | RSV  | RCK   | NHI  | RSV  | RCK  | NHI   | RSV  | RCK  | NHI   | RCK               | RSV  | NHI  |
| <b>OZONE</b>                                                                                                                                                                                                                                                                                                                                                                                               |      |       |      |      |      |       |      |      |       |                   |      |      |
| Highest 1-hour                                                                                                                                                                                                                                                                                                                                                                                             | --   | .17   | .12* | .15* | .15  | .11*  | .12  | .13  | .12   | .15               | .14  | .13  |
| Days>0.12 ppm (Fed)                                                                                                                                                                                                                                                                                                                                                                                        | --   | 7     | 0    | 3    | 3    | 0     | 0    | 1    | 0     | 3                 | 2    | 1    |
| Days>0.09 ppm (Cal)                                                                                                                                                                                                                                                                                                                                                                                        | --   | 41    | 3    | 14   | 21   | 7     | 19   | 29   | 16    | 23                | 15   | 21   |
| <b>CARBON MONOXIDE</b>                                                                                                                                                                                                                                                                                                                                                                                     |      |       |      |      |      |       |      |      |       |                   |      |      |
| Highest 1-hour                                                                                                                                                                                                                                                                                                                                                                                             | --   | 9     | 7    | 6*   | 4    | 6*    | 5    | 5    | 7*    | 3                 | 4    | 5    |
| Days>35 ppm (Fed)                                                                                                                                                                                                                                                                                                                                                                                          | --   | 0     | 0    | 0    | 0    | 0     | 0    | 0    | 0     | 0                 | 0    | 0    |
| Days>20 ppm (Cal)                                                                                                                                                                                                                                                                                                                                                                                          | --   | 0     | 0    | 0    | 0    | 0     | 0    | 0    | 0     | 0                 | 0    | 0    |
| Highest 8-hour                                                                                                                                                                                                                                                                                                                                                                                             | --   | 2.3   | 3.9  | 2.8* | 2.3  | 3.7*  | 3.0  | 2.3  | 6.3*  | 1.6               | 2.2  | 3.4  |
| Days>=9.5 ppm (Fed)                                                                                                                                                                                                                                                                                                                                                                                        | --   | 0     | 0    | 0    | 0    | 0     | 0    | 0    | 0     | 0                 | 0    | 0    |
| Days>=9.1 ppm (Cal)                                                                                                                                                                                                                                                                                                                                                                                        | --   | 0     | 0    | 0    | 0    | 0     | 0    | 0    | 0     | 0                 | 0    | 0    |
| <b>PARTICULATES (PM<sub>10</sub>)</b>                                                                                                                                                                                                                                                                                                                                                                      |      |       |      |      |      |       |      |      |       |                   |      |      |
| Highest 24-hour                                                                                                                                                                                                                                                                                                                                                                                            | --   | 48    | 79   | 52   | 41   | 63    | 65   | 51   | 92    | 55                | 61   | 69   |
| Days>50 ug/m <sup>3</sup> (Cal)                                                                                                                                                                                                                                                                                                                                                                            | --   | 0     | 6    | 1    | 0    | 7     | 3    | 1    | 5     | 1                 | 2    | 4    |
| Annual average                                                                                                                                                                                                                                                                                                                                                                                             | --   | 25.9* | 28.0 | 23.4 | 20.3 | 23.3* | 23.3 | 21.8 | 24.5* | 24.1              | 26.0 | 24.1 |
| >30 ug/m <sup>3</sup> ? (Cal)                                                                                                                                                                                                                                                                                                                                                                              | --   | No    | No   | No   | No   | No    | No   | No   | No    | No                | No   | No   |
| <sup>1</sup> Stations: RSV (Roseville), RCK (Rocklin), NHI (North Highlands)<br><sup>2</sup> Preliminary data.<br>-- Station not in operation at this time.<br>* Data presented are valid, but incomplete in that an insufficient number of valid data points were collected to meet EPA and/or ARB criteria for representativeness.<br><br>NM: Not Measured<br><br>SOURCE: California Air Resources Board |      |       |      |      |      |       |      |      |       |                   |      |      |



**TABLE G-2**  
**ASSUMPTIONS FOR INPUTS INTO CALINE4**

| Parameter                      | Assumption (Source)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aerodynamic Roughness Coef.    | 100 cm $\approx$ Single Family Residential (Benson)                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Settling & Deposition Velocity | 0 cm/s (Randall and Ng 1987) for CO                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Altitude Above Sea Level       | 0 feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Roadway Height                 | 0 ft (Assuming at grade)                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Z Receptor Coordinate          | 1.5 m (Caltrans 1988)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| X & Y Receptor Coordinates     | 4 ea. $\{+ [4m * (\text{North-South Lanes} + 2)], + 4m * (\text{East-West Lanes} + 2)]\}$ ;<br>4 ea. $\{+ [4m * (\text{North-South Lanes} + 3)], + 4m * (\text{East-West Lanes} + 2)]\}$ ;<br>4 ea. $\{+ [4m * (\text{North-South Lanes} + 2)], + 4m * (\text{East-West Lanes} + 3)]\}$ ;<br>4 ea. $\{+ [4m * (\text{North-South Lanes} + 4)], + 4m * (\text{East-West Lanes} + 2)]\}$ ;<br>4 ea. $\{+ [4m * (\text{North-South Lanes} + 2)], + 4m * (\text{East-West Lanes} + 4)]\}$ . |
| Link Endpoints                 | 500 m from the intersection (Benson 1984)                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Stopline Distance              | 500 m - $[(\text{Cross-street Lanes} + 1) * 4 \text{ m}]$ (Caltrans 1988)                                                                                                                                                                                                                                                                                                                                                                                                               |
| Mixing Zone Width              | $[12 \text{ ft} * (\text{Number of Lanes})] + 6 \text{ m}$ (Caltrans 1988)                                                                                                                                                                                                                                                                                                                                                                                                              |
| Deceleration Time to 0 mph     | 20 mph = 5.1 s, 25 mph = 6.5 s, 30 mph = 7.3 s, 35 mph = 8.2 s, 40 mph = 8.9 s,<br>45 mph = 9.1 s, 50 mph = 9.8 s, and 55 mph = 10.2 s<br>(Association of American Street and Highway Officials)                                                                                                                                                                                                                                                                                        |
| Acceleration Time from 0 mph   | 15 mph = 6 s, 20 mph = 10 s, 25 mph = 13 s, 30 mph = 17 s, 35 mph = 21 s, 40 mph = 26 s,<br>45 mph = 32 s, 50 mph = 37 s, and (Wood 1991) 55 mph = 42 s (interpolation)                                                                                                                                                                                                                                                                                                                 |
| Speed                          | Congested Flow Speeds from Traffic Consultant                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Emission Factor                | EMFAC7F version 1.1 for County (CARB 1994)                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Mixing Width Right & Left      | 0 ft (If no canyon or bluffs)                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Cycle Length                   | 60 seconds                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Vehicle Idle time at Stopline  | $1 / \text{Ratio of the traffic volume}$ (Wood 1991)                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Vehicle Idle time at End       | 0 s (Wood 1991)                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Wind Direction                 | All [Worst-case angle search] (Benson 1984)                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Wind Speed                     | 1 m/s (Caltrans 1993)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Atmospheric Stability          | F = 6 (ibid)                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Mixing Height                  | 1000 m (Caltrans 1988)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Sigma Theta                    | 5° (ibid)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Ambient Concentration          | 1996 Existing: Roseville Maximum [1993-1995], adjusted per SMAQMD rollback: 1-hour = 7.0 ppm and 8-hour = 3.9 ppm (CARB 1992 - 1993 and Sacramento Metropolitan AQMD 1995)                                                                                                                                                                                                                                                                                                              |
| January Morning Temperature    | Screen Temp +5°F = 45°F (Caltrans 1988)                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Link Type                      | Intersection = 6 (Benson 1984)                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Percent Hot Starts             | 25% (Caltrans 1995)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Percent Cold Starts            | 30% (ibid)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Vehicle Mix                    | Transportation Project-Level CO Protocol (Caltrans 1996)                                                                                                                                                                                                                                                                                                                                                                                                                                |
| SOURCE: EIP Associates, 1996.  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## BIBLIOGRAPHY

- Benson, Paul. *CALINE 3 - A Versatile Dispersion Model for Predicting Air Pollutant Levels Near Highways and Arterial Streets*. Office of Transportation Laboratory, Sacramento, CA.
- Benson, Paul, 1984. *CALINE4 - A Dispersion Model for Predicting Air Pollutant Concentrations Near Roadways*. Office of Transportation Laboratory, Sacramento, CA, November.
- California Air Resources Board, 1991. *California Air Quality Data Summary of 1991 Air Quality Data Gaseous and Particulate Pollutants*. Technical Support Division, Volume XXIII, Annual Summary, Sacramento.
- California Air Resources Board, 1992. *California Air Quality Data Summary of 1992 Air Quality Data Gaseous and Particulate Pollutants*. Technical Support Division, Volume XXIV, Annual Summary, Sacramento.
- California Air Resources Board, 1993. *California Air Quality Data Summary of 1993 Air Quality Data Gaseous and Particulate Pollutants*. Technical Support Division, Volume XXV, Annual Summary, Sacramento.
- California Department of Transportation, 1988. *Air Quality Technical Analysis Notes*. Office of Transportation Laboratory, Sacramento, CA, September.
- California Department of Transportation, 1992 and 1993. *Several Personal Communications with Sam Shiow (January 4, 6, and 21, 1993), facsimile transmittal on January 6, 1993 from Sam Shiow and letter communications with Somchai Chongchaitit (October 13, 1992), January 11, 25 and 27, 1993) of Caltrans District 4 on CALINE 4 assumptions*.
- Randall, Patrick and Harry Ng, 1987. *Air Quality Analysis Tools (AQAT-2)*. Technical Support Division, Sacramento, CA.
- US EPA, 1985. *Compilation of Air Pollutant Emission Factors, Volume II Mobile Sources*. Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711. September.
- Wood, Dick, 1991. *Personal Communication with Dick Wood of California Department of Transportation on CALINE 4 assumptions*. Office of Transportation Laboratory, Sacramento, CA, February 14.

---

---

***APPENDIX H***  
***MITIGATION MONITORING PLAN***

---

---





---

---

## *TABLE OF CONTENTS*

---

---



---

---

## *TABLE OF CONTENTS*

---

---

| <u>Chapter</u>                                  | <u>Page</u> |
|-------------------------------------------------|-------------|
| 1. INTRODUCTION .....                           | 1-1         |
| 2. MASTER MITIGATION MONITORING CHECKLIST ..... | 2-1         |
| 3. PRE-CONSTRUCTION MEASURES .....              | 3-1         |
| 4. CONSTRUCTION MEASURES .....                  | 4-1         |

### APPENDICES

#### A. Mitigation Measure Field Verification Form

---

**LIST OF TABLES**

---

| <u>Table</u>                                                                     | <u>Page</u> |
|----------------------------------------------------------------------------------|-------------|
| 2-1 North Roseville Specific Plan<br>Draft Mitigation Monitoring Checklist ..... | 2-1         |

---

---

**LIST OF FIGURES**

---

| <u>Figure</u>                    | <u>Page</u> |
|----------------------------------|-------------|
| 1-1 Regional Location Map .....  | 1-3         |
| 1-2 Proposed Land Use Plan ..... | 1-5         |

---



---

---

## ***1. INTRODUCTION***

---

---



---

---

## ***1.0 INTRODUCTION***

---

---

### **Background**

Section 21081.6 of the California Public Resources Code requires public agencies to "adopt a reporting and monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This monitoring program is required for the North Roseville Specific Plan (Proposed Project) because the Environmental Impact Report (EIR) for the project has identified significant adverse impacts, and mitigation measures have been identified to mitigate those impacts. Adoption of this mitigation monitoring plan shall occur prior to, or concurrently with, adoption of the Proposed Project for which the plan has been developed. All mitigation measures and the plan requirements will be included as conditions of project approval. The Applicant will be responsible for all mitigation costs and implementation of mitigation measures unless otherwise stated.

### **Purpose of the Mitigation Monitoring Plan (MMP)**

The purpose of this plan is:

- to ensure that mitigation measures are implemented;
- to provide feedback to agency staff and decision makers about the effectiveness of the measures;
- to provide learning opportunities for improving mitigation measures on future projects; and
- to identify the need for enforcement action before irreversible environmental damage occurs.

### **Monitoring Process**

Existing monitoring mechanisms are in place to assist the City of Roseville in meeting the intent of CEQA. These include, among others, monitoring of Specific Plan implementation and annual monitoring of compliance with the Development Agreement. These existing monitoring mechanisms eliminate the need to develop separate monitoring processes for each mitigation

measure. Those mitigation measures that are monitored through existing City mechanisms are indicated on the Mitigation Monitoring Checklist as follows:

|         |   |                                                      |
|---------|---|------------------------------------------------------|
| GP      | - | As required by the General Plan                      |
| DG      | - | As required by the North Roseville Design Guidelines |
| DA      | - | As required in the Development Agreement             |
| TP      | - | Condition of Tree Permit                             |
| GRP/IMP | - | Grading Permit/Improvement Plans                     |
| BP      | - | Condition of building permit                         |
| SRP     | - | Condition of Design Review Permit                    |
| CIP     | - | Add to Capital Improvement Program                   |
| TM      | - | Condition of Tentative Map                           |

Those measures that require separate monitoring processes are monitored through this document, and indicated on the checklist as "MMP" (with corresponding page numbers where the monitoring program can be found in this document). City responsibilities are briefly described below and a sample monitoring form is provided in Appendix A.

The Roseville Planning Department (project planner) will monitor tree preservation and project design mitigation measures. The Roseville Public Works Department (construction inspector) will be responsible for monitoring construction-related mitigation measures, such as erosion control. Other measures will be monitored by other divisions of the Roseville Community Development Department.

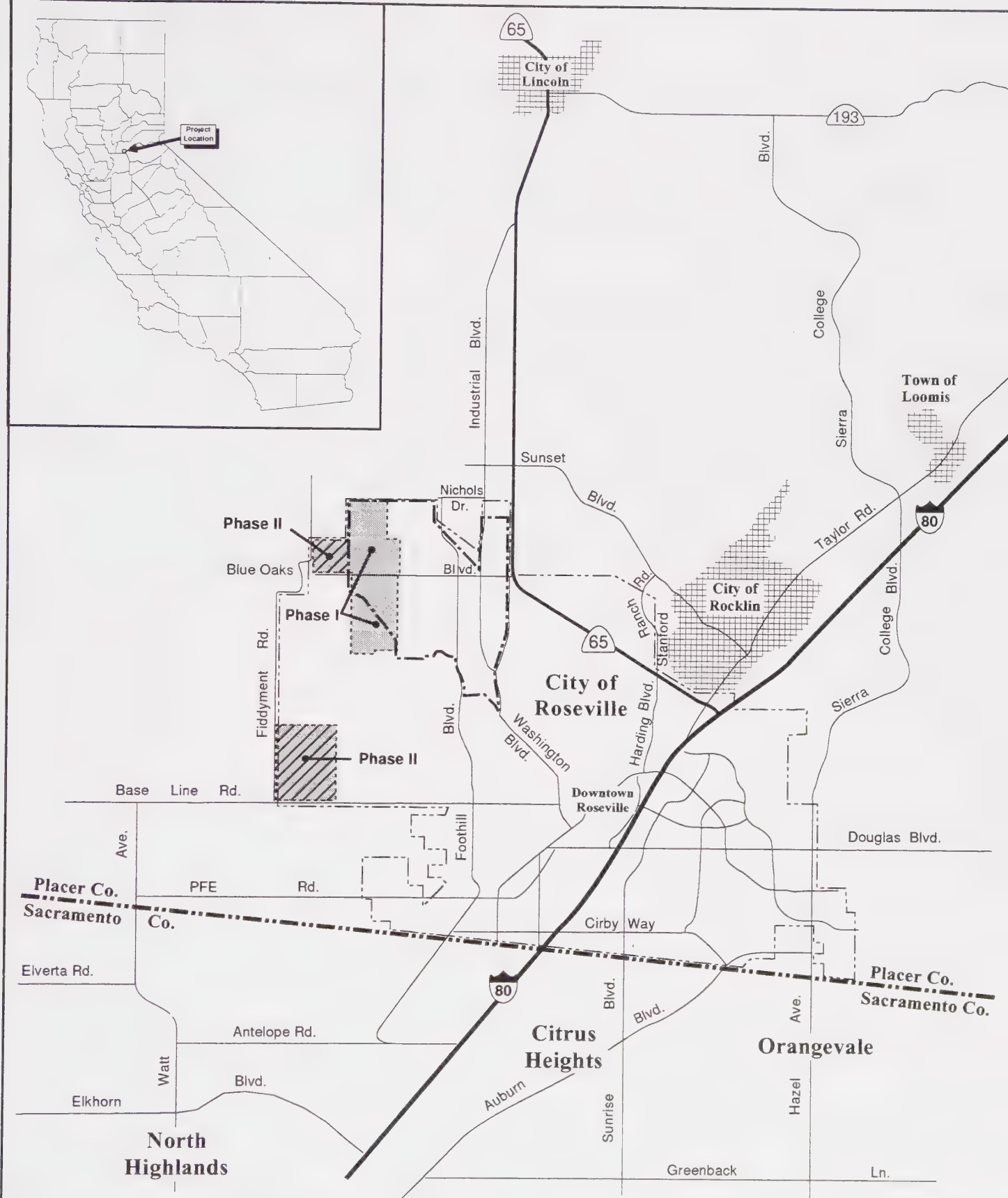
The Project Applicant/contractor will be responsible for preparing brief monitoring letters to provide project updates. The frequency of these letters will vary during the course of the project and will be determined by the City (Planning, Public Works, and Community Development Departments). The purpose of the letters is to assist City staff in keeping abreast of the complicated construction process and any problems that have arisen in the previous week. The Planning, Public Works, and Community Development Departments will review the letters, verify the conditions, and take action, as necessary.

The Community Development Department may choose to prepare a final summary of project monitoring upon completion of all mitigation measures. This report would be used to refine mitigation measures in the future.

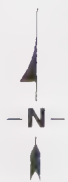
### **Project Location**

The Proposed Project is located in the City of Roseville in Placer County, California along the northern and western boundaries of the City of Roseville (see Figure 1). The NRSP area (Plan Area) consists of a total of approximately 1,390 acres. The first phase (Phase I), consisting of 736 contiguous acres of land, is located immediately east of Del Webb, north of Blue Oaks Boulevard to the city limits and south of Blue Oaks Boulevard to the Woodcreek Golf Club. The second phase (Phase II), which is designated Urban Reserve, consists of two discontinuous parcels -- Neighborhood C and Neighborhood D. Neighborhood C is 161 acres immediately west of the Phase I site. Neighborhood D is a 492-acre site bounded by the Del Webb Specific Plan to the





SOURCE: EIP Associates, May 1997.



0 2,000 4,000  
Scale in Feet

- Specific Plan Area (Phase I)
- Specific Plan Urban Reserve Areas (Phase II)
- Roseville City Limits
- North Roseville Industrial Area

**Figure 1**

**Regional Location Map**

96063  
Regional





north, the Northwest Roseville Specific Plan to the east, Fiddymment Road to the west and Baseline Road to the south.

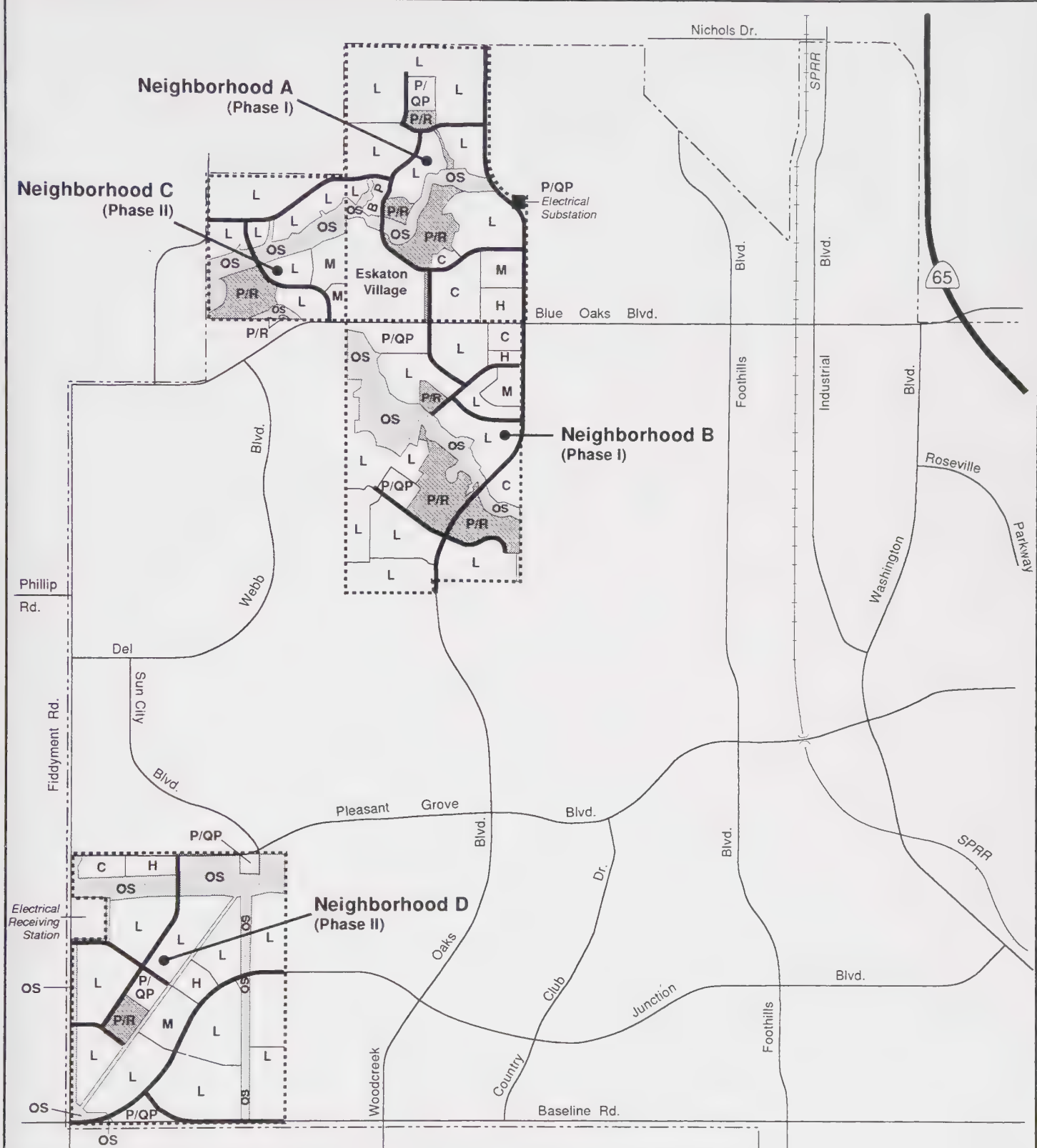
The Proposed Project is generally situated six miles west of Interstate 80 (I-80). State Highway 65 (SR 65) provides access from the northwest and intersects I-80 in Roseville. The Proposed Project is approximately one mile west of the Blue Oaks Boulevard interchange on SR 65.

### **Project Description**

The primary planned land uses include detached single-family residential, multi-family residential, commercial, schools, parks and open space areas (see Figure 2, Proposed Land Uses). The Phase I development scenario includes 1,848 low and medium-density residential units, 275 high-density residential units, and 400 attached units for seniors, 37.7 acres of commercial uses and 4.4 acres devoted to business-professional development, three school sites for a total of 38.3 acres, 79.2 acres of parks, and 81.5 acres dedicated for open space. The Full Project includes a total of 3,977 low and medium-density residential units, 1,121 high density residential units (including the 400 attached units), 44.6 acres of commercial, 4.4 acres of business-commercial, 48.3 acres for four school sites, 108.8 acres of parks, and 193.2 acres of open space. Total buildout of the Proposed Project is anticipated to occur incrementally over a 20 to 25 year time frame. Figure 2 illustrates the Proposed Project land uses.







..... Neighborhood Boundary Within Specific Plan Area

--- Roseville City Limits

□ Open Space

▨ Parks

— Existing and Approved Roads

— Proposed Roads

**L**=Low Density Residential (LDR)

**M**=Medium Density Residential (MDR)

**H**=High Density Residential (HDR)

**C**=Commercial (COMM)

**BP**=Business-Professional

**P/R**=Park-Recreation

**P/QP**=Public/Quasi Public

**OS**=Open Space

**Figure 2**

**Proposed Land Use Plan**

0      1/4      1/2

Scale In Miles

↑

— N —

↓

96063

Base

SOURCE: Wade Associates, North Roseville Specific Plan Draft, 1996; EIP Associates, May 1997.



---

---

## ***2. MASTER MITIGATION MONITORING CHECKLIST***

---

---





**NORTH ROSEVILLE SPECIFIC PLAN  
MASTER MITIGATION MONITORING CHECKLIST**

| Mitigation Measure Number        | Mitigation Measure                                                                                                                                                                                        | Monitoring Mechanism                                             | Responsible for Monitoring |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------|
| <b>Pre-Construction Measures</b> |                                                                                                                                                                                                           |                                                                  |                            |
| 4.3-1                            | Comply with site-specific geotechnical evaluation.                                                                                                                                                        | GRP/IMP, MMP, see page 3-1                                       | Eng.                       |
| 4.4-1                            | Design and site structures and amenities within parks and open space designations to prevent flood flow obstruction, and demonstrate no increase in off-site water surface elevations from such features. | DA, TM, Park development approval, GRP/MP, BP, MMP, see page 3-3 | Eng.<br>Parks              |
| 4.4-2                            | Ensure that regional retention facilities are adequate to contain runoff volumes.                                                                                                                         | BP                                                               | Bldg.                      |
| 4.5-1                            | Preserve and construct vernal pools or purchase credits in an approved wetland mitigation bank.                                                                                                           | GRP/IMP, MMP, see page 3-4.                                      | CDD/Eng.                   |
| 4.5-3                            | Incorporate soil and seedbank salvage in construction of vernal pools.                                                                                                                                    | TP, GRP/IMP, MMP, see page 3-6                                   | Eng./PIng.                 |
| 4.5-4                            | Conduct pre-construction nest survey and implement appropriate restrictions.                                                                                                                              | TP, GRP/IMP, MMP, see page 3-8                                   | Eng./PIng.                 |
| 4.6-2(a)                         | Conduct archeological testing.                                                                                                                                                                            | TM, DRP, BP, GRP/IMP, see page 3-10                              | Eng./PIng.                 |
| 4.6-2(b)                         | Preserve or record sites, consistent with CEQA Guidelines.                                                                                                                                                | TM, DRP, BP, GRP/IMP, see page 3-11                              | PIng.                      |
| 4.8-1                            | Remediate site hazards, if discovered.                                                                                                                                                                    | GRP/IMP, TM, DRP, BP, see page 3-13                              | Eng./PIng./Fire,<br>Bldg.  |
| 4.9-1                            | Update the Long Range Transit Master Plan.                                                                                                                                                                | DA, CIP, MMP, see page 3-14                                      | PWD                        |
| 4.9-2                            | Amend the transportation CIP to provide roadway improvements.                                                                                                                                             | DA, CIP, MMP, see page 3-15                                      | PWD                        |
| 4.11-1                           | Provide appropriate noise attenuation; e.g., barriers and/or setbacks based on site-specific acoustical analyses.                                                                                         | DG, TM, DRP, BP                                                  | PIng./Eng.                 |
| 4.11-2                           | Conduct noise analysis to specify soundwall design.                                                                                                                                                       | DG, TM, DRP, BP                                                  | PIng./Eng.                 |
| 4.12-1                           | Restrict development until water capacity increases.                                                                                                                                                      | GP, DA                                                           |                            |
| 4.12-13                          | Construct new fire station.                                                                                                                                                                               | DA, BP                                                           | Fire                       |

| NORTH ROSEVILLE SPECIFIC PLAN<br>MASTER MITIGATION MONITORING CHECKLIST |                                                                                                                                 |                                             |                            |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------|
| Mitigation Measure Number                                               | Mitigation Measure                                                                                                              | Monitoring Mechanism                        | Responsible for Monitoring |
| <b>Construction Measures</b>                                            |                                                                                                                                 |                                             |                            |
| 4.5-2                                                                   | Implement construction protocols.                                                                                               | TP, GRP/IMP, TM, DRP, BP, MMP, see page 4-1 | Plng./Eng.                 |
| 4.6-1                                                                   | Cease work and consult a qualified archaeologist.                                                                               | GRP/IMP, TM, DRP, BP, MMP, page 4-3         | Eng.                       |
| 4.8-2(a)                                                                | Clear areas slated for construction activities of materials that could serve as fire fuel prior to initiating these activities. | GRP/IMP, TM, BP, DRP, MMP, see page 4-4     | Eng./Bldg.                 |
| 4.8-2(b)                                                                | Require spark-generating construction equipment to be equipped with manufacturer's recommended spark arrests.                   | GRP/IMP, TM, DRD, MMP, see page 4-5         | Eng.                       |
| 4.10-1(a)                                                               | Provide dust controls.                                                                                                          | GRP/IMP, TM, DRP, BP, MMP, see page 4-6     | Eng.                       |
| 4.10-1(b)                                                               | Properly maintain construction equipment.                                                                                       | GRP/IMP, TM, BP, DRP, MMP, see page 4-8     | Eng.                       |
| <b>Operation Measures</b>                                               |                                                                                                                                 |                                             |                            |
| 4.12-2                                                                  | Increase number of police officers in beat area.                                                                                | DA, GP                                      | Plng.                      |
| 4.12-4                                                                  | Contribute to library funding.                                                                                                  | DA, GP                                      | Plng.                      |

## NOTES:

BP - Building Permit  
 DA - Development Agreement  
 DG - North Roseville Design Guidelines  
 GP - General Plan  
 GRP/IMP - Grading Permit/Improvement Plans  
 DRP - Design Review Permit  
 TP - Tree Permit  
 CIP - Capital Improvement Program  
 TM - Tentative Map

Eng. = Engineering  
 Parks = Parks Department  
 Bldg. = Building Department  
 Plng. = Planning Department  
 Fire = Fire Department  
 PWD = Public Works Department

---

---

### ***3. PRE-CONSTRUCTION MEASURES***

---

---





## PHASE - PRE-CONSTRUCTION

### EIR CHAPTER: 4.3 SOILS, GEOLOGY AND SEISMICITY

#### Mitigation Measure:

#### 4.3-1 Comply with site-specific geotechnical evaluation.

Prior to the commencement of any earthwork on the Proposed Project, a full-scale geotechnical investigation shall be completed. The geotechnical investigation shall include:

- Soil borings,
- Laboratory testing, and
- Grading and design recommendations.

The grading and design recommendations should, at a minimum, address the following issues:

- Fill control plan,
- Expansive soils,
- Differential settlement,
- Slope instability,
- Foundation instability,
- Stream bank protection, and
- Other significant geological characteristics pertinent to proper development of the Plan Area.

The geotechnical investigation shall consist of soil borings to collect samples and laboratory testing to determine the appropriate design parameters for use in determination of the structural fill, roadbed fill, and landscaping fill requirements, along with the fill placement requirements. The various soils should also be tested for corrosivity, to allow for proper foundation design.

Design of engineered fills shall require that the geotechnical investigation assess the structural properties of each of the different soils types throughout the Proposed Project site. Such an investigation would address specific areas of the Proposed Project site to be developed in order to account for the various structures and roadways proposed for that particular area.

Grading and fill placement shall be monitored and compaction testing should be performed to ensure proper placement of all fill types (structural, non-structural, and roadbed).

In addition to the measures mentioned above, soils shall be tested for their shrink-swell potential. Soils with low strength and/or high shrink-swell potential shall be controlled by over-excavation, or covering these soils with a sufficient amount of granular soils (as determined by the geotechnical investigation). Potentially expansive soils shall only be placed in areas determined not to consist of structural fill.

In addition to evaluation for engineered fills, specific geotechnical evaluation of engineered slopes shall be included in the geotechnical evaluation. All proposed cut and/or fill slopes shall be

evaluated for proper design in order to reduce the hazard of over-steepening and/or removing of their lateral support, both of which could lead to slope instability, structural failure, and landsliding. If necessary, slopes shall be designed with additional lateral support, such as buttressing, and fill slopes shall be properly keyed into competent formational materials. Slopes (banks) along the creek channels shall be designed with proper slope protection to prevent soil erosion and channel-bank undercutting.

**Implementing Parties:** Applicant, Contractor

**Agency or  
Individual  
Responsible for  
Monitoring:**

Public Works Department - Engineering Division

**Timing:**

Prior to approval of any grading or improvement plans for the Proposed Project.

**Monitoring  
Work Program:**

The Public Works Department shall review the results of a geotechnical investigation performed by the Applicant or Applicant's consultant. The review will verify that all required components have been included, and that the findings of the investigation have been incorporated into the final plans, prior to commencement of any earthwork on the property.

**Standards of  
Success:**

This measure will be deemed successful when an adequate geotechnical investigation, as specified, is performed and recommendations from the investigation are appropriately considered and incorporated in final design.

**PHASE - PRE-CONSTRUCTION****EIR CHAPTER: 4.4 HYDROLOGY AND WATER QUALITY****Mitigation Measure:**

- 4.4-1 **Design and site structures and amenities within parks and open space land designations to prevent flood flow obstruction, and demonstrate no increase in off-site water surface elevations from such features.**

Structures and amenities associated with anticipated uses within areas of the Parks and Open Space land use designations that are included in the 100-year floodplain shall be designed and sited to ensure that such features do not obstruct flood flows, do not create a public safety hazard, or result in any increase in off-site water surface elevations. Recreational amenities such as picnic tables and backstops shall be designed, placed, and securely fastened to allow for water to easily flow through or around them and so that they do not become dislodged during flood events. Fences, if any, shall be sized, placed, and securely anchored to minimize the potential for floodwaters to flow towards unprotected areas or areas not within the floodplain. Permanent features such as restroom facilities shall be constructed in accordance with applicable requirements and situated where they will not exacerbate flooding.

**Implementing Parties:** Applicant, Contractor

**Agency or  
Individual  
Responsible for  
Monitoring:**

Public Works Department, Parks and Recreation Department

**Timing:**

Concurrent with approval of grading/improvement plans or building permit for development in or adjacent to drainages.

**Monitoring  
Work Program:**

The Public Works Department shall review design of facilities in floodplain.

**Standards of  
Success:**

This measure will be deemed successful when the design of facilities in the floodplain meets the City's approval, and they are constructed.



## PHASE - PRE-CONSTRUCTION

### EIR CHAPTER: 4.5 BIOLOGICAL RESOURCES

#### Mitigation Measure:

Preserve and construct vernal pools or purchase credits in an approved wetland mitigation bank.

Each property within the Plan Area shall be permitted under the Clean Water Act Section 404 permit process prior to development. Mitigation would consist of on-site avoidance where practicable and desirable, on-site wetland construction where practicable and desirable, and/or off-site wetland construction and off-site acquisition where approved by the permitting agencies.

As an alternative to preserving and recreating wetlands, the Applicant could, prior to issuance of building permits, acquire credits from a Wetland Mitigation Bank approved by the US Army Corps of Engineers and the USFWS for the purposes of mitigating impacts on vernal pools, fairy shrimp and vernal pool plant species. The credits shall be in direct proportion to vernal pool losses on the property, as determined by a wetland or habitat delineation.

In the event this mitigation is implemented, the applicant will incur no further obligation for surveys, monitoring, salvage notification or seedbank salvage, as required by the operation of the approved Mitigation Bank.

**Implementing Parties:** Applicant's Biologist

**Agency or  
Individual  
Responsible for  
Monitoring:**

USACOE - 404 Permit

**Timing:**

Prior to approval of a grading permit and during construction of vernal pools.

**Monitoring  
Work Program:**

The Applicant's biologist shall review the workplan for salvage and construction of new vernal pools to ensure that appropriate soil and seedbank salvage measures are implemented. The Applicant's biologist shall review the USFWS guidelines for salvage and construction if the Applicant chooses to use the guidelines in lieu of an independent plan.

The plan shall contain at a minimum the requirement to scrape and store the top 1: of any vernal pools to be salvaged, followed by the next 3". The salvaged material shall be stored in a cool dry place, away from elevated temperatures that could harm seeds or



inoculum in the soil. The two layers of salvaged material shall be placed in restored or constructed vernal pools in reverse order (e.g., the 3" level first, followed by the 1" level. The standards for the workplan shall adhere to the current USFWS guidelines required for 404 or Section 10 compliance if they depart from these standards.

The City shall confirm, prior to approval of grading permit, that property subject to a permit is included within a valid 404 permit.

**Standards of  
Success:**

The workplan contains measures to remove, salvage, store and apply the top 4" of soil according to this minimum standard, or the current USFWS guidelines for vernal pool construction under Section 404 or Section 10.

## PHASE PRE-CONSTRUCTION

### EIR CHAPTER: 4.5 BIOLOGICAL RESOURCES

#### Mitigation Measure:

4.5-3 Incorporate soil and seedbank salvage in construction of vernal pools.

In the mitigation of vernal pools that would be filled or otherwise disturbed, the landowners shall use harvested inoculum from on-site vernal pools. Removal of topsoil from harvested vernal pools shall comply with the most recent USCOE and USFWS guidelines at the time of construction, or consist of removal of the top 2" of soil, followed by the next 4" of soil, and placement of these layers in constructed vernal pools in reverse order (e.g. first the 4" followed by the 2") to approximately reconstruct the natural soil horizon.

If mitigation banking is used as mitigation instead of vernal pool recreation, this mitigation measure would not apply.

**Implementing Party:** Applicant's Biologist

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Community Development Department and Planning Department

**Timing:** Prior to excavation of areas containing vernal pools

**Monitoring  
Work Program:**

The Applicant's biologist will review the results of a botanical survey of vernal pools and seasonal wetlands in the Plan Area. The survey will be completed by a competent qualified botanist as determined by the Applicant's biologist. The objective of the survey will be to determine the presence or absence of any special-status vernal pool plants, including specifically those that qualify for listing under California Fish and Game Code 1901. These plants are considered to be those listed at the time of the survey by the California Native Plant Society as 1b or 2. Surveys will be conducted during an appropriate time period when the species in question can be recognized by flower or other distinguishing features.

If special-status plant species are found in the Plan Area, appropriate notification as specified under the provisions of California Fish and Game Code 1900 *et seq* will be made so that appropriate salvage arrangements can be made.

**Standards of  
Success:**

Surveys for non-listed vernal pool plant species completed.

California Department of Fish and Game notified of any species found in Plan Area vernal pools.

## PHASE - PRE-CONSTRUCTION

### EIR CHAPTER: 4.5 BIOLOGICAL RESOURCES

#### Mitigation Measure:

4.5-4 Conduct pre-construction nest survey and implement appropriate restrictions.

To ensure that fully protected and raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the applicant shall implement the following measures:

- (a) When feasible, all tree removal shall occur between August 30 and March 15 to avoid the breeding season of any raptor species that could be using the area, and to discourage hawks from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of the DFG, or
- (b) Prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between March 15 to August 30, all trees within 350 feet of any grading or earthmoving activity shall be surveyed for active raptor nests by a qualified biologist. If active raptor nests are found, and the site is within 350 feet of potential construction activity, a fence shall be erected around the tree at a distance of up to 350 feet, depending on the species, from the edge of the canopy to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City. The City may consult with CDFG regarding the appropriate buffer distance.
- (c) No construction vehicles shall be permitted within restricted areas (i.e., raptor protection zone), unless directly related to the management or protection of the legally-protected species.
- (d) In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the developer shall contact CDFG and, subject to CDFG approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).

For tree removal, the following measure shall be implemented:

- (e) If a legally-protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 30, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.

**Implementing Party:** Developer's biologist



**Agency or  
Individual  
Responsible for  
Monitoring:**

Community Development Department, Engineering Department

**Timing:**

Prior to issuance of tree permit, tree removal or grading permits for construction within 350 feet of trees; prior to site disturbance and during the appropriate season.

**Monitoring  
Work Program:**

Either all tree removal shall be conducted between August 30 and March 15, or the Applicant shall contract with a qualified biologist to survey for raptor nests prior to each phase. Data will be recorded by survey personnel concerning:

1. date which pre-construction surveys are initiated, performed, and completed,
2. survey methods and objectives,
3. complete species list,
4. results of surveys, and
5. mitigation and timing to prevent next disturbance.

If nests are found, the City shall:

1. require that construction activities avoid active nests,
2. monitor nest activity, and
3. provide a buffer zone of up to 350' between March 15 and August 30, with the exact buffer to be determined by the City.

**Standards of  
Success:**

City shall ensure pre-construction surveys performed prior to construction activities in each phase and, if active nest(s) are found, a qualified biologist monitors nest(s) while construction activities are in the vicinity to ensure that buffer zones are established and active nest(s) disturbance is avoided.

**PHASE - PRE-CONSTRUCTION****EIR CHAPTER: 4.6 CULTURAL RESOURCES****Mitigation Measure:**

4.6-2(a): Conduct archaeological testing.

Prior to any grading, excavation, or construction within the boundary of the archaeological site CA-PLA-138 (defined on Maps 2 and 3 in the "Site Boundary Definition of Archaeological Sites CA-PLA-138 and CA-PLA-429" report prepared by Peak & Associates, Inc. on September 1, 1994, and contained in the confidential Cultural Resource Appendix to this document), a qualified archaeologist shall conduct archeological testing to obtain data that would address the issue of site importance under CEQA. For archaeological site CA-PLA-429, a qualified archaeologist shall be present during the initial site grading of the area as defined on Map 4 (site definitions also contained in the above-referenced report). The monitoring of the grading activity shall be within an area 50 feet in width (25 feet north and south of the existing dirt road) and 50 feet in length (beginning at the eastern edge of the border of the parcel. This area of monitoring encompasses 2,500 square feet, or 0.06 acres.

**Implementing Party:** Applicant's archaeologist

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Planning Department/Public Works

**Timing:** Concurrent with Tentative Map, Design Review Permit approval or, if neither permit required, prior to grading or construction activities in areas of identified cultural resources

**Monitoring  
Work Program:**

The Applicant shall contract with an archaeologist to determine if either site CA-PLA-138 or CA-PLA-429 contains any subsurface deposits and is worth preserving. Providing cultural deposits are present, the archaeologist shall submit a report to the Roseville Planning Department identifying the site boundaries, and, if the site could be affected by grading or construction activities, recommend measures for preservation or recordation.

**Standards of  
Success:**

Determination of historical significance of site CA-PLA-138 or CA-PLA-429. If significant, preservation or recordation, per Mitigation Measure 4.6-2(b).

## PHASE - PRE-CONSTRUCTION

### EIR CHAPTER: 4.6 CULTURAL RESOURCES

#### Mitigation Measure:

4.6-2(b) Preserve or record sites, consistent with CEQA Guidelines.

Under CEQA guidelines, archeological sites CA-PLA-138 and CA-PLA-429 could be simply avoided or capped (after the accurate extent of the sites are known) as outlined in *Supplementary Document J*, Section II-B, without any assessment of whether or not the sites are "important archaeological resources".

If sites CA-PLA-138 and/or CA-PLA-429 are to be destroyed, they shall be fully recorded by a qualified archaeologist.

Adequate recordation would include, at a minimum, the following:

- the development of site-specific history and appropriate and contextual information regarding the particular resource; in addition to archival research and comparative studies, this tasks could involve limited oral history collection;
- accurate mapping of the noted resources, scaled to indicate size and proportion of the structures;
- architectural descriptions of affected structures;
- photodocumentation of the designated resources, both in still and video formats; and
- recordation of measured architectural drawings, in the case of specially designated buildings of higher architectural merit.

**Implementing Party:** Applicant's archaeologist

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Planning Department/Public Works

**Timing:**

Upon determination that sites, CA-PLA-138 and CA-PLA-429 are significant under CEQA or NRHP, and that they will be damaged or destroyed by the Proposed Project, and prior to Tentative Map or Design Review Permit, or issuance of grading permit.

**Monitoring  
Work Program:**

If a site is deemed significant and it will be destroyed or damaged, the following steps will be taken:

- The land use plan will be amended to avoid the site, which will be fenced or otherwise protected from vandalism.

-or-

- The site will be capped, per CEQA Supplementary Document J.

-or-

- The site will be recorded as indicated above.

**Standards of  
Success:**

Full preservation, through avoidance or capping of significant sites, or, if a significant site will not be preserved, full recordation as indicated.



## PHASE - PRE-CONSTRUCTION

### EIR CHAPTER: 4.8 HAZARDOUS MATERIALS AND PUBLIC SAFETY

#### Mitigation Measure:

4.8-1 Remediate site hazards, if discovered.

If evidence of contamination is discovered, work shall cease until the site can be investigated and remediated.

**Implementing Party:** Applicant

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Building Department

**Timing:** When evidence of contamination is discovered.

**Monitoring  
Work Program:**

For projects where contamination is discovered, the Applicant shall provide proof to the City that the project site has been fully evaluated and remediated.

**Standards of  
Success:**

Full evaluation and remediation of all contaminated areas discovered during construction activities.

## PHASE - PRE-CONSTRUCTION

### EIR CHAPTER: 4.9 TRANSPORTATION AND CIRCULATION

#### Mitigation Measure:

4.9-1 Update the Long Range Transit Master Plan.

Development of Phase I and the Full Project should be included as part of the Long Range Transit Master Plan and should be consistent with the applicable General Plan transit policies in the Circulation Element.

**Implementing Parties:** Applicant, Roseville Public Works Department-Land Development and Transportation Division

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Public Works Department - Land Development and Transportation Division

**Timing:**

The Long Range Master Plan should include the NRSP in the next update.

**Monitoring  
Work Program:**

The Public Works Department shall update the LRMP to include the Proposed Project.

**Standards of  
Success:**

The LRMP is updated as indicated.

## PHASE - PRE-CONSTRUCTION

### EIR CHAPTER: 4.9 TRANSPORTATION AND CIRCULATION

#### Mitigation Measure:

4.9-2 Amend the transportation CIP to provide the following roadway improvements.

- (a) Add a third through lane in both directions of Blue Oaks Boulevard from Foothills Boulevard to H.P.'s Collector "B".

This measure is required for the Full Project only. Amend the current CIP to include the addition of a third through lane in both directions of Blue Oaks Boulevard from Foothills Boulevard to H.P.'s Collector "B". This improvement will provide LOS "C" or better conditions for the Full Project.

- (b) Add a second northbound left turn lane to the intersection of Foothills Boulevard and Blue Oaks Boulevard.

This measure is required for the Full Project only. This improvement would result in LOS "C" conditions or better.

**Implementing Parties:** Applicant, Roseville Public Works Department-Land Development and Transportation Division

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Public Works Department - Land Development and Transportation Division

**Timing:**

The CIP shall be updated to reflect the addition of a third through lane in both directions of Blue Oaks Boulevard from Foothills Blvd. to H.P. "B" and a second northbound left turn lane at the intersection of Foothills Boulevard and Blue Oaks Boulevard. The fee shall be collected concurrent with the issuance of building permits and as dictated in Development Agreement.

**Monitoring  
Work Program:**

The Public Works Department shall update the transportation CIP to add a third through lane in both directions of Blue Oaks Boulevard from Foothills Boulevard to H.P.'s Collector "B."

**Standards of  
Success:**

The transportation CIP is updated as indicated and the Applicant has paid a fair share cost.



---

---

#### ***4. CONSTRUCTION MEASURES***

---

---



## PHASE - CONSTRUCTION

### EIR CHAPTER: 4.5 BIOLOGICAL RESOURCES

#### Mitigation Measure:

#### 4.5-2 Implement construction protocols.

The Proposed Project shall require the implementation of construction protocols that include, but may not be limited to, the following:

- Restrict construction activities to areas away from preserved oak and riparian habitat.

Construction activities in the vicinity of oak trees shall be minimized. Lay down, staging, refueling and parking areas shall not be located adjacent to open space oak or riparian zones. Construction activities that by necessity occur in the vicinity of oak woodlands and riparian zones to be preserved shall be supervised by an onsite responsible compliance officer designated by the developer. Encroachments or damage that have not been authorized by a tree permit shall be prohibited, and measures to prevent damage to trees in the vicinity shall be implemented as detailed in the Tree Preservation Chapter of the Roseville Zoning Ordinance.

- Erect temporary barrier fencing to delimit protected areas.

Temporary fencing, consisting of five-foot orange construction drift fence, flagging, signs or other markings shall be erected around open space areas and restricted areas, and maintained for the duration of construction, to prevent inadvertent damage to natural resources. Fencing shall be maintained and shall be the responsibility of an on-site compliance officer designated by the developer.

**Implementing Parties:** Applicant's Biologist, Contractor

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Planning Department/Public Works

**Timing:**

Incorporate measures into grading/improvement plans and tree permit exhibits, and identify the extent of construction. Orient construction workers and erect temporary fencing prior to first day of construction. Visual inspections periodically as required.

**Monitoring  
Work Program:**

The Developer shall incorporate restricted zones into grading/improvement plans and tree permit exhibits submitted to the Planning, Public Works Department, and all workers.

The Public Works and Planning Departments should perform visual inspections periodically to:

- Verify that temporary fencing and flagging, signs, and other marking devices are maintained for the duration of the construction activity. If deficiencies are noted, they must be promptly corrected, or construction activities may be halted.
- Verify that construction works and equipment remain outside of restricted areas.

**Standards of  
Success:**

- Roseville Public Works and Planning Departments approve plans and observe that construction and parking are not occurring in preservation areas.



## PHASE - CONSTRUCTION

### EIR CHAPTER: 4.6 CULTURAL RESOURCES

#### Mitigation Measure:

4.6-1 Cease work and consult a qualified archaeologist

In the event of the discovery of buried archaeological deposits it is recommended that project activities in the vicinity of the find should be temporarily halted and a qualified archaeologist consulted to assess the resource and provide proper management recommendations. Possible management recommendations for important resources could include resource avoidance or data recovery excavations.

**Implementing Parties:** Applicant, Contractor

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Planning Department/Public Works Applicant/Contractor

**Timing:** During construction activities.

**Monitoring  
Work Program:**

The Applicant must notify the City and consult with a qualified archaeologist if archaeological deposits are discovered before construction activity in the vicinity resumes.

**Standards of  
Success:**

This measure will be deemed successful if, in the event of an archaeological discovery, construction is temporarily halted, the Planning and Public Works Departments are notified, a qualified archaeologist is consulted, recommendations are implemented, and purpose and standards of state statutes governing cultural resources are met.

**PHASE - CONSTRUCTION****EIR CHAPTER: 4.8 HAZARDOUS MATERIALS AND PUBLIC SAFETY****Mitigation Measure:**

- 4.8-2(a) Clear areas slated for construction activities of materials that could serve as fire fuel prior to initiating these activities

During construction, staging areas, welding areas, or areas slated for development in the near future where equipment will be operating on dried vegetation or other materials that could serve as fire fuel would be cleared. The contractor will maintain areas subject to such construction activities clear of combustible natural materials to the extent feasible in order to maintain a fire break. This measure would minimize the availability of fire fuels.

**Implementing Parties:** Applicant

**Agency or  
Individual  
Responsible for  
Monitoring:**

Engineering Department

**Timing:** During construction

**Monitoring  
Work Program:**

The construction inspector should perform periodic inspections of the construction site to verify that potential fire fuel is cleared from construction areas.

**Standards of  
Success:**

This measure will be deemed successful when all areas slated for construction activities have been cleared of materials that could serve as fire fuel prior to initiating these activities.

**PHASE - CONSTRUCTION****EIR CHAPTER: 4.8 HAZARDOUS MATERIALS AND PUBLIC SAFETY****Mitigation Measure:**

4.8-2(b) Require spark-generating construction equipment to be equipped with manufacturer's recommended spark arresters

Any construction equipment that normally includes a spark arrester is to be equipped with such an arrester in good working order. This includes, but is not limited to, heavy equipment, chainsaws, etc. This mitigation measure would minimize the source of construction-related fire.

**Implementing Parties:** Applicant

**Agency or  
Individual  
Responsible for  
Monitoring:** Engineering Department

**Timing:** During construction

**Monitoring  
Work Program:** The City shall receive a written statement from the Applicant that all spark-generating construction equipment is equipped with manufacturer's recommended spark arresters.

**Standards of  
Success:** This measure will be deemed successful when the Public Works Department receives a written statement that spark arresters are properly fitted on construction equipment.

## PHASE - CONSTRUCTION

### EIR CHAPTER: 4.10 AIR QUALITY

#### Mitigation Measure:

##### 4.10-1(a) Provide dust controls.

In order to reduce construction-generated PM<sub>10</sub> emissions, the contractor shall comply with the dust control strategies developed by the Placer County APCD. The developer shall include in construction contracts the following requirements or measures shown to be equally effective:

- (i) The contractor shall water as indicated by City inspectors to keep all earth surfaces moist during clearing, grading, earthmoving and other site preparation activities.
- (ii) The contractor shall sweep or wash streets within and adjacent to the project as needed or as directed by City inspectors.
- (iii) The contractor shall schedule clearing, grading and earthmoving activities during periods of low wind speeds, and restrict those construction activities during high wind conditions with wind speeds greater than 20 mph average during an hour.
- (iv) The contractor shall minimize open burning of wood and vegetative waste materials from both construction and operation of the project. No open burning shall occur unless it can be demonstrated to the Placer County APCD that alternatives have been explored. These alternatives may include, but are not limited to, chipping, mulching and conversion to biomass fuel. For any open burning, an APCD permit must be obtained in conformance with APCD Regulation 3 (Open Burning), Rules 301-325.

**Implementing Parties:** Contractor

**Agency or  
Individual  
Responsible for  
Monitoring:**

Applicant and Public Works Department

**Timing:** During construction

**Monitoring  
Work Program:**

The Applicant shall require its contractor to control dust watering or ceasing grading activities when wind velocity exceeds 15 miles per hour. The City through the grading permit has enforcing authority to be used in the event construction dust is not controlled.



**Standards of  
Success:**

This measure will be deemed successful if construction-related  $PM_{10}$  emissions are left at a less-than-significant level.

## PHASE - CONSTRUCTION

### EIR CHAPTER: 4.10 AIR QUALITY

#### Mitigation Measure:

4.10-1(b) Properly maintain construction equipment.

The developer shall reduce NO<sub>x</sub>, ROG and CO emissions by complying with the construction vehicle air pollutant control strategies developed by the Placer County APCD. The Developer shall include in construction contracts and in notes on grading plans the following requirements or measures shown to be equally effective:

- (a) Construction equipment operators shall shut off equipment when not in use to avoid unnecessary idling. As a general rule, vehicle idling should be kept below 10 minutes.
- (b) Contractors' construction equipment shall be properly maintained and in good operating condition.
- (c) During second stage smog alerts, the construction day shall be shortened and the number of vehicles and equipment operating at the same time shall be reduced.
- (d) Contractors shall use new technologies to control ozone precursor emissions as they become available and feasible.

**Implementing Parties:** Developer, Applicant, City Inspector

**Agency or  
Individual  
Responsible for  
Monitoring:**

Roseville Public Works Department - Land Development and Transportation Division

**Timing:** Prior to the issuance of grading permits, and periodically throughout construction.

**Monitoring  
Work Program:**

The Developer shall provide to the City a written statement that construction equipment has been properly maintained and that construction is proceeding as specified. The City Inspector shall periodically inspect operations at the site to verify compliance with Mitigation Measure 4.10-1(b).

**Standards of**

**Success:**

When the Public Works Department receives a written statement of appropriate equipment maintenance and that construction is proceeding as specified, as verified by periodic site inspections.





---

---

*APPENDIX A*

*MITIGATION MEASURE FIELD VERIFICATION FORM*

---

---



**NORTH ROSEVILLE SPECIFIC PLAN  
MITIGATION MEASURE FIELD VERIFICATION FORM**

---

**MONITORING PHASE:**

☐ Pre-Construction

☐ Construction

☐ Operational

☐ Compensation

---

**WORK PACKAGE:**

---

**PROJECT LOCATION:**

---

**REQUIREMENT MET OR IS CONTINUING TO BE MET:**

| Date  | Yes   | No    | Mitigation Measure Number | Description of Mitigation Measure |
|-------|-------|-------|---------------------------|-----------------------------------|
| <hr/> | <hr/> | <hr/> | <hr/>                     | <hr/>                             |
| <hr/> | <hr/> | <hr/> | <hr/>                     | <hr/>                             |
| <hr/> | <hr/> | <hr/> | <hr/>                     | <hr/>                             |
| <hr/> | <hr/> | <hr/> | <hr/>                     | <hr/>                             |
| <hr/> | <hr/> | <hr/> | <hr/>                     | <hr/>                             |
| <hr/> | <hr/> | <hr/> | <hr/>                     | <hr/>                             |

---

**COMMENTS:** (Attach additional sheets as necessary)

---

---

---

---

---

I hereby certify that I have inspected the project site and that the above information is true to the best of my knowledge.

Name (print) \_\_\_\_\_

Representing \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_





U.C. BERKELEY LIBRARIES



C124919458



